



R E P O R T

ON THE

Sanitary Condition

OF THE

County Borough

OF

Birkenhead,

FOR THE YEAR 1915,

BY

Dr. R. SYDNEY MARSDEN, F.R.S. (Edin.)

Medical Officer of Health.

BIRKENHEAD :

WILSON & JONES, 92 HAMILTON STREET.

—
1916.

HEALTH COMMITTEE
OF THE
BIRKENHEAD TOWN COUNCIL,
1915-16.

||†§*MR. ALDERMAN E. G. MASON, J.P., CHAIRMAN.

||†§*MR. ALDERMAN THOMAS SHAW, DEPUTY-CHAIRMAN.

||†§*MR. ALDERMAN MICHAEL BYRNE,

||‡*MR. ALDERMAN FREDERICK NAYLOR, J.P.

MR. COUNCILLOR JAMES ASPINALL.

§MR. COUNCILLOR W. M. CAMPBELL,

MR. COUNCILLOR M. M FORSYTHE

||†§*MR. COUNCILLOR ROBERT FRAME.

§MR. COUNCILLOR WILLIAM JACKSON, J.P.

†*MR. COUNCILLOR W. W. KELLY.

§MR. COUNCILLOR FRANK TWEEDLE.

§MR. COUNCILLOR JOHN PLATT.

||†§MR. COUNCILLOR DAVID ROGER ROWLANDS.

AND

HIS WORSHIP THE MAYOR.

(JAMES MERRITT, ESQ.)

Day of Meeting every alternate Tuesday at 4 p.m.

* Members of the Health Sub-Committee.

† Members of the Hospital Sub-Committee.

§ Members of the Housing Sub-Committee.

‡ Members of the Shops Act—Sub-Committee.

|| Members of the Dispensary and Sanatorium Sub-Committee.

PUBLIC HEALTH DEPARTMENT,
1915.

Medical Officer of Health and Supervising Tuberculosis Officer.
DR. R. SYDNEY MARSDEN, F.R.S. (Edin.)

Tuberculosis Officer and Assistant M.O.H.
CYRIL BANKS, M.B., B.Surg. (Lond.) D.P.H.

PROFESSOR J. M. BEATTIE, M.D., Ch.M. (Edin.), M.A.,
Borough Bacteriologist.
University of Liverpool.

Borough Analyst.
HERBERT E. DAVIES, M.A. (Camb.), B.Sc., F.I.C.

Chief Inspector and Inspector under the Food and Drugs Act.
*WILLIAM DAWSON, ASSOC. SAN. INST.

Chief Clerk.
JOSEPH BENNETT.

Statistical Clerk.
JOHN OWEN.

Junior Clerks.
J. R. KNOWLES, R. E. JONES, E. P. ROGERS, MISS A. JONES.

Inspector of Meat, Fish, and Slaughter Houses.
*JOHN M. CARNIE *Assistant—A. CARNIE.*

Inspector of Housing.
*A. LONGSTAFF.

District Sanitary Inspectors.

*JOHN LEE. *H. T. TAYLOR. *W. H. TILSTON.
 *JOSEPH CROSHAW.

Inspector of Workshops and Bakehouses.
*S. G. RACKHAM.

<i>Inspector under the Tuberculosis Order.</i>	<i>Tuberculosis Nurse.</i>
*MISS MARION GIBSON.	MISS S. JONES.

Inspector under the Shops Act, 1912.
GEORGE WILLS.

Inspector of Common Lodging Houses and Houses let in Lodgings.
JOHN JONES.

<i>Disinfecting Inspector.</i>	<i>Keeper of Disinfecting House.</i>
ISAAC TAYLOR.	JNO. TAYLOR.

Health Visitors.

Three Female Health Visitors, one of whom acts as Inspector of Midwives.

ROBERT NIELD. *Disinfecting Labourers.* *JOHN JACKMAN. JOHN DAVIES.

Those marked thus * have passed the examination of the Sanitary Institute
or the Scottish Sanitary Institute.

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*To the Mayor, Aldermen, and Council of the
County Borough of Birkenhead.*

GENTLEMEN,

I have the honour of submitting to you my Twenty-Fourth Report to the Health Committee on the Health of Birkenhead, viz., that for the year 1915.

In spite of the War the work of the Department has been carried on smoothly, and I trust efficiently, and the results I hope will be found to be satisfactory.

The Report is submitted on similar lines to my previous Reports.

I have the honour to be,

Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,
MEDICAL OFFICER OF HEALTH.

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

April 4th, 1916.

COUNTY BOROUGH OF BIRKENHEAD

DURING 1915.

SHORT SUMMARY.

Area in Acres	3,850, or a little more than 6 sq. miles.
Population (at Midsummer)	140,291
No. of Inhabited Houses.....	25,399
Number of Inhabited Houses at time of Census, 1911	24,343
- Number of Persons per House at time of Census, 1911	5.3
Rateable Value	£710,280
1d. in the £ yielded for General Purposes	£2,775
1d. in the £ yielded for Sanitary purposes	£2,520
Number of Persons per Acre (Density of Population)	36.4
Birth Rate per 1,000 living	27.4
Death Rate do.	15.6
Zymotic Death Rate per 1,000 living	1.5
Phthisis Death Rate do.	1.2
Average Death Rate last 10 years	15.4
Deaths of Children under 1 year of age to 1,000 Births	122
Percentage of Uncertified Deaths	0.13
Houses provided with Ashbins (approximately)	19,300
Houses provided with Ashpits do.	7,500
All the houses are provided with w.c's. with the exception of about 18 which have privies. 12 of these are not used. The 6 are in places where at present w.c's. cannot be provided. There are 3 earth closets in Oxton.	

THE SANITARY CONDITION
OF THE
COUNTY BOROUGH OF BIRKENHEAD
DURING 1915.

*Report of the Medical Officer of Health to the
Health Committee.*

I am glad to be able to report that the Health of the Borough during the year 1915, as estimated by the general mortality, was in a most satisfactory condition, the Death rate of 15·6 per 1,000 being the same as last year, which is a low figure, and only 0·7 higher than in 1913 (which was the next lowest we have ever had) and the lowest in the District with the exception of Wallasey

The Infantile Death rate, 122 per 1000 births, is the same as that recorded for 1914, and must be regarded as relatively satisfactory, being exactly the same as the average for the 46 large towns in 1914, but I cannot give comparisons with other towns this year, as I have been unable to get the information.

The birth rate for the year, 27·4, is 0·1 higher than last year, and is one of the highest rates in the country.

The following Table showing the Birth and Death rates is interesting.

BIRKENHEAD	Year	Population	Density per acre	Death Rate per 1000	Birth Rate per 1000	Infantile Death Rate per 1000 births	Total Zymotic Death Rate per 1000	Phthisis Death Rate per 1000
	1892	102038	26·5	19·2	32·7	170	3·0	1·5
	1902	113231	29·4	17·5	32·1	151	2·3	1·7
	1912	133521	34·6	14·7	28·2	98	1·4	1·1
	1913	135740	35·2	14·9	28·7	117	1·5	1·2
	1914	137996	35·8	15·6	27·3	122	1·7	1·0
	1915	140291	36·4	15·6	27·4	122	1·5	1·2

HOUSING OF THE WORKING CLASSES.

In my 1913 Report (p. 9) I gave a short history of the subject of "Housing" in the Borough up to the end of that year, and on pages 8 and 9 of my last year's report I gave a full description of the

GILBROOK ESTATE HOUSING SCHEME,

which, however, has not been gone on with for the present, owing to the difficulty of getting money and labour during the War.

The subject, however, has greatly increased in importance at the present time owing to the large influx of men and families into the town, due to the extension and increase of work at Messrs. Cammell Laird & Co., thereby rendering the present number of houses in the town totally unequal to the demand, and I do not think that this demand will be met in the future by private enterprise, but will have to be provided by the Corporation, and I estimate that at least 1,000 houses will have to be provided especially to meet the call for houses at low rents of from 3/- to 5/- per week.

ESTIMATE OF THE POPULATION.

The question of housing is one intimately connected with the estimate of population in the Borough, and because on this

estimate the rates of mortality, etc., are calculated, it is, therefore, most important that the estimate should be fairly accurate.

Long before War broke out, Messrs. Cammell Laird & Co.'s works were in full employment.

In 1914, the number of inhabited houses was 25,295, and the population was 133,000. In 1915, the number of inhabited houses was 25,399, and the estimated population 140,291 (most of the unoccupied houses being of a large type in the better parts of the Town), this giving an average of 5·5 persons per house—that is slightly under the number (5·6) recorded at the Census of 1901, but 0·2 more than was recorded in 1911, so that our estimate may be taken to be as nearly accurate as can be estimated. The housing accommodation of the Borough for a number of years has been insufficient to meet the requirements, and many of the workers in the Town have to reside in Liverpool, Wallasey, or other surrounding districts. These non-residents, of course, are not included in my return.

The Registrar General's Estimate of Population.

In February, the Registrar General sent an intimation that basing a calculation on the National Register made on 15th August, 1915, he estimated the civil population of Birkenhead as 134,913, as owing to the abnormal circumstances prevailing at the present time the ordinary methods of calculation are not applicable, and asking that the rates, etc., should be based on this calculation.

In accordance with this request I give the following return:—

Population as per Registrar General	No. of persons per acre	Birth Rate	Death Rate	Zymotic Death Rate	Phthisis Death Rate	Infantile Mortality per 1000 Births
134,913	35·0	27·8	16·2	1·5	1·2	122

I totally disagree with this method of estimation for the following reasons:—

The Registrar General states that “men of military age have been largely drafted to military training centres or sent abroad with the Army, and the remainder of the male adult population, as well as, to a lesser extent, the female population has migrated on an unprecedented scale into areas other than those in which it was enumerated at the last Census.”

I find no evidence to support the above statement as regards Birkenhead; and although I have not the figures as to how many men had joined the Army and Navy from Birkenhead up to June 30th, 1915, the number of men working at the various munition factories and shipbuilding yards fully equalizes this, as the number of houses occupied shows.

Then again the “natural” increase in the population (excess of births over deaths) in 1915 was 1651 as against 1639 in 1914, and is practically in the same ratio to the population as calculated by me. If, however, the Registrar General’s figures, showing a decrease of 5378 in the population are taken, the ratio is entirely out of proportion.

As regards the Military population in the Borough no notice has been taken of this although a very large proportion of the Birkenhead recruits have been stationed at the Depôts here with the Cheshire Regiment which most of them have joined—no doubt some of these have been drafted to other places, but their number has been balanced by men coming here from other districts in their stead.

I think, therefore, everything being taken into account, that the population of the Borough, as estimated by me, is as nearly accurate as can be arrived at.

A subject which again occupied the attention of the Committee for a considerable time was that of

MATERNITY AND CHILD WELFARE.

And it will be remembered that in relation to this matter I made a report to the Committee on the following lines :—

“In a circular letter from the Government Board, dated 30th July, 1914, relative to the above matter.

The Board point out that an estimate has been laid before Parliament for a grant, to be distributed by the Board, in aid of the expenditure of Local Authorities in respect of Institutions or other provision for maternity and child welfare. This grant, if voted by Parliament, will be made in aid of expenditure in respect of Clinics, Dispensaries, or other Institutions primarily concerned with the provision of medical and surgical advice and treatment, as well as in respect of the salaries of health visitors and other officers engaged for this work.

Up to the present, Local Authorities, in their infant welfare work, have concerned themselves chiefly with the child in its first year of life. The Board now considers that the subject should be dealt with on a more comprehensive basis, dealing with the whole period from birth until the time the child enters school. It suggests that the work should be undertaken in two directions:—

1st The securing of improved ante-natal and natal conditions;

2nd. The continuing of the work in relation to children beyond the first year of life.

The accompanying Memorandum sets out fully the arrangements which the Board thinks should be carried out.

A complete scheme would comprise the following elements, each of which will, in this connection, be organized in its direct bearing on infantile health.

1. Arrangements for the local supervision of Midwives.

2. Arrangements for—

ANTE-NATAL.

- (1) An Antenatal Clinic for expectant mothers,
- (2) The home visiting of expectant mothers.
- (3) A Maternity Hospital or beds at a hospital, in which complicated cases of pregnancy can receive treatment.

3. NATAL.

- (1) Such assistance as may be needed to ensure the mother having skilled and prompt attendance during confinement at home.
- (2) The confinement of sick women, including women having contracted pelvis or suffering from any other condition involving danger to the mother or infant, at a hospital.

4. POST-NATAL.

- (1) The treatment in a hospital of complications arising after parturition, whether in the mother or in the infant.
- (2) The provision of systematic advice and treatment for infants at a Baby Clinic or Infant Dispensary.
- (3) The continuance of these Clinics and Dispensaries, so as to be available for children up to the age when they are entered on a school register, *i.e.*, the Register of a Public Elementary School, Nursery School, Crèche, Day Nursery, School for Mothers, or other school.

(4) The systematic home visitation of infants and of children not on a school register as above defined."

In my last year's report I gave in full detail (pp. 22—27) the scheme as it is proposed to be worked. Premises have been secured, and as soon as vacant possession can be obtained, they will be put into order and made suitable for carrying on the work, and the Maternity and Child Welfare Centre will be in operation.

THE VALUE OF INFANT LIFE.

A writer in the "Telegraph" has called attention to the fact that the terrible slaughter taking place in the present War is raising the value of human life, and before it is all over we shall have lost many thousands of our best citizens, and many of the most fit of its manhood. Other wars have left us sadder and poorer, but not seriously depleted in manhood, and there is no denying that the population of Great Britain, as well as of the Colonies, will by the war is over be very appreciably reduced.

The future of the Country then, depends on the children of to-day, and no effort must be spared to preserve the young life of the nation. Are we in Birkenhead doing all that can be done in this direction?

In normal times in England and Wales there are about 800,000 babies born per annum, and of these something like 100,000 die before they are 12 months old.

The actual figures, as given by Mr. Walter Long, President of the Local Government Board, as to the deaths of infants under one year of age in England and Wales are as follows:—

Six months ended March 31, 1913	...	47,274
" " " 1914	. .	48,965
" " " 1915	...	50,219
" " " 1916	...	41,971

And out of every 1000 that die, some 109 pass away within

the first twenty-four hours of life, and about thirty within the first 14 days.

The figures vary according to local conditions, being less in the country areas than in the small towns, and higher in the congested areas of the large County-Boroughs.

In Birkenhead, for 1000 children born, 11 die within the first 24 hours, 20 within 1 week, 37 within 4 weeks and 121 within the first year of life.

To meet this strain on infant life, many towns are instituting Maternity and Child Welfare Centres, and before this report is printed I expect that the one in Birkenhead will be in full working order and active operation.

On page 25 of my last year's report, I gave some account of the working of these Clinics to which I would again refer you, and for those Members of the Council who are not already acquainted with these institutions it may be explained that the first effort made is to secure the attendance of the expectant mother some weeks or months before the anxious event. She is then advised by the doctor in charge as to the care of her own health, the food she should eat, and the work or exercise to undertake or avoid. She is helped in the preparation of the baby's garments, shown how to cut them out after good patterns, and what can be knitted in spare moments. After the infant's birth she brings it to the Centre at specified intervals, when it is weighed, its general condition noticed, and advice is tendered, always with the idea of preventing the development of any source of trouble. The Health Visitors assist by calling at the homes to see that the instructions are carried out, and a sense of pride and progress is thus encouraged in every possible way—the interest of the mother in the well-being of her children being fostered and developed.

CARAVANS.

A number of ratepayers have called my attention to certain caravans which have been situated in the same yard for some 18

months to 2 years, and which they consider ought to be dealt with by the Health Authority. In this matter, however, I am powerless, and I would urgently press it as a subject which should be dealt with by the Local Government Board with reference to giving more powers in relation to such cases.

The facts are these,

In a small yard, with a total area of 196 sq. yards, there are placed five caravans with a population of 11 adults and 5 children, or 16 persons in all—this gives a population of 395 persons per acre, or in other words the place is densely overcrowded.

As these vans are dwellings *on wheels* I cannot treat them as if they were houses, and require separate W.C. and Ashbin accommodation, nor can I deal adequately with the water supply etc. As it is

There is no proper drainage system in this yard, the surface of which is unpaved, covered with black ashes, which set firm and are even in surface during dry weather, but become broken and sodden in wet weather.

There is no ashpit or ashbin accommodation, the occupiers of the vans using a wooden barrel and an old dilapidated dustbin for their refuse.

There is a water tap provided in the yard, which is used by all the different families.

There is no W.C. accommodation in this yard.

Adjacent to the above yard is another larger yard in part of which there are 4 vans containing 6 adults and 7 children.

The same condition of affairs exists here, only that there is more space allowed between the vans, and in addition to a water-tap there is a water-closet provided, which is used by the occupants of all the vans in *both* yards, and is the only sanitary convenience available for 8 different families, consisting of 17 adults and 12 children.

Yet to me it seems very doubtful whether, under the existing laws, I have any power to deal with this state of things (Sec. 9, Housing of the Working Classes Act, 1885).

There is no limit to the length of time they can remain in any one place, and are thus able to defeat all housing regulations.

I cannot insist on the paving of the yard and drainage of slop-water, as they are not permanent dwellings.

The people also pay no rates or taxes, except as regards the water supply, which the owner of the yard has to pay I suppose, and get it back in rent of standing space.

The subject is one, as I said before, which requires very serious consideration, and extra powers ought to be given to us to deal with such cases.

SPECIAL WORK DONE IN CONSEQUENCE OF THE WAR.

A good deal of extra work has had to be done by the Health Department in connection with the outbreak of the War and the opening of a number of Schools, Dwelling-houses and other buildings for Military purposes, all of which have had to be examined and reported upon as to their sanitary arrangements and conditions, and where necessary put into proper order.

The premises have also been frequently and regularly inspected.

Special arrangements have been made for the frequent removal of the domestic refuse.

The following is a summary of the work done in this connection by the Department, viz:—

The number of premises occupied by troops and carefully
inspected by us is 38

The number of visits paid by the District Sanitary Inspectors to the above premises was 1205, and a number of visits of inspection have also been made by the Chief Inspector of Nuisances and myself.

The total number of articles of bedding, clothing, etc., disinfected for the Military Authorities during 1915 was 12,119. A large proportion of these being in a verminous condition.

There were also 6 soldiers cleansed for vermin at the Disinfecting Station.

In the succeeding pages of this report will be found details of the work carried on by the Public Health Department, together with the vital and mortal statistics of the Borough during the year under consideration, as follows:—

DETAILED STATEMENT OF THE WORK OF THE PUBLIC HEALTH DEPARTMENT DURING 1915.

Ordinary Sanitary Operations.—The ordinary sanitary operations of the Department have continued to receive unremitting attention. House-to-house inspections of the cottage property in the Borough have been regularly made. Gulleys and passage drains have been periodically cleansed, public fountains, &c., have been scoured and kept in order, and the systematic removal of ashpit and house refuse at stated intervals has been carefully superintended, although great difficulty has been experienced owing to the shortage of labour.

Summary of Nuisances, &c.—The summary of nuisances investigated and dealt with during 1915 is as follows:—

Number of nuisances reported	...	...	...	1915. 7535
Number of formal notices given	...	...	...	2522
Number abated after formal notice and without proceedings	...	...	...	2522

Number of cases in which proceedings had to be taken for ordinary nuisances	...	...	nil
Number abated after proceedings...	...	...	nil
House disinfecting notices...	...	...	310
Nuisances at houses let in lodgings	...	...	153
Nuisances at common lodging houses	...	...	64
Notices for cleansing of filthy houses	...	...	13

A brief statement of the other measures taken in 1915 for correcting or getting rid of whatever appeared to be prejudicial to health is subjoined.

Sanitary defects reported by the Inspectors and referred for the action of the Borough Surveyor	...	...	...	...	455
Matters reported to Water Engineer	...	...	...	...	291
Matters reported to Borough Treasurer	...	...	...	...	66
Houses or parts of houses specially disinfected by formalin or other disinfectants	...	...	...	...	647
Notice to whitewash and efficiently cleanse milk-houses, cowsheds and dairies, given and complied with	...	...	...	...	410
Offensive privies abolished	...	...	...	...	2
Parcels of infected bedding and clothes disinfected at the Disinfecting Station	..	...	...	...	775
Parcels of infected or discarded bedding and clothes destroyed	...	...	...	...	539
Carcases of dogs and cats &c. removed from pools or waste land and buried	...	...	...	...	58
Deposits of putrid fish and other objectionable refuse removed	...	...	...	...	2
Total	...	...	...	...	3245

In addition to the above, the following work has been done:—

Number of excavations made for the purpose of testing the condition of house drains	98
Number of smoke tests applied to drains of premises reconstructed under the supervision of this Department	... 101
Number of water tests applied to drains.	... 102
Number of smoke tests applied to the drains of new buildings, in conjunction with the Borough Surveyor's Department	127

District Inspections.—The following is a statement of the work done by the District Inspectors of Nuisances and the Disinfecting Inspector during 1915.

				Number of Visits and Revisits made to Insanitary Property.
District I.—Inspector Croshaw	...	...	5056	
„ II.— „ Lee	...	...	4372	
„ III.— „ H. T. Taylor	...	...	5180	
„ IV.— „ W. H. Tilston	...	...	5362	
Disinfecting Inspector Isaac Taylor	...	...	4435	
Total				24405

Smoke Nuisances.—Observations were taken of the smoke emitted from the factory and other chimneys of the Borough during the year 1915. 4 notices were served for the abatement of smoke nuisances.

Inspection of School Premises.

Working in conjunction with the Education Department, I had 33 schools specially examined by the District Inspectors and reported thereon to the Education Committee.

Inspection of Common Lodging Houses and Houses let in Lodgings.

The following is a statement of the work performed during the year 1915 by the Inspector of Common Lodging Houses and Houses let in Lodgings, viz :—

REGISTERED COMMON LODGING HOUSES.

Day Inspections	4636
-----------------	-----	-----	-----	-----	-----	------

Night Inspections	598
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The total number of registered lodging houses is 19.

REGISTERED HOUSES LET IN LODGINGS.

Day Inspections	3149
-----------------	-----	-----	-----	-----	-----	------

Night Inspections	392
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The total number of houses let in lodgings on the register at the end of 1915 was 729.

Corporation Tenement Dwellings.—375 visits were made during the year by the Inspector of Lodging Houses, &c., and 361 nuisances were reported, which have been abated.

FACTORY AND WORKSHOP ACTS,

1901 and 1907.

In connection with the carrying out of the provisions of these Acts, the following is a statement of the work done by the Inspector during the year, viz :—

1420 visits have been made to workshops.

473 visits have been made to bakehouses.

74 visits have been made to workplaces.

193 visits have been made to homeworkers' premises.

54 workshops, including 6 bakehouses, have been placed on the register during the year, making a total of 476 up to the end of 1915, of which 55 are bakehouses and 49 are confectioners' shops.

21 workshops have been closed.

4 workshops have been transferred to more suitable premises.

58 nuisances in connection with workshops have been reported and abated.

7 notices have been served for the abatement of nuisances arising out of defective drainage, and 4 for inefficient ventilation.

18 notices to cleanse and limewash the workshops have been served and complied with.

458 occupiers of workshops have limewashed their premises under inspection, but without waiting for the formal notice.

No case of overcrowding has been reported during the year.

10 failures to affix abstract of the Factory and Workshops Act (s. 133), have been reported and dealt with.

Lists of out-workers have been carefully kept, and notices in the form prescribed by the Secretary of State, as given in my Report for 1892 (pp. 57 and 58), have been served when necessary.

Laundries.—239 visits were made during the year to the 52 laundries at present on the register.

Bakehouses.—The duties involved in carrying out the provisions of the Acts relating to the sanitary condition of bakehouses have been put under a special Inspector, and during the year 473 visits have been made to bakehouses.

There has been a very great improvement secured by this systematic inspection.

SHOPS ACTS, 1912 and 1913.

(Which repeal the Shops Regulations Acts, 1892—1911.)

The total number of visits paid to the various shops under the provisions of the above Acts and orders made thereunder during the year was 8305.

The particulars respecting the various proceedings and prosecutions taken under these Acts and Orders during the year are as follows, viz:—

41 infringements were reported and 36 letters of warning sent in connection therewith, prosecutions being taken in the remaining 5 cases, with the following results:—

For failing to close the shops for the sale of certain articles on Weekly Half-holiday.

		Fine.	Costs.
Ditto	Ditto	5/-	6/6
Ditto	Ditto	16/-	—
Ditto	Ditto	6/-	—
Ditto	Ditto	10/-	—
Ditto	Ditto	20/-	—

Administration of the Factory and Workshop Acts, 1901 & 1907,

IN CONNECTION WITH

Factories, Workshops, Laundries, Workplaces and
Homework.

1. INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories (including Factory Laundries) ..	Nil	—	—
Workshops (including Workshop Laundries)	2132	29	—
Workplaces (other than Outworkers' premises included in Part 3 of this Report) ..	74	—	—
Total	2206	29	—

2. DEFECTS FOUND.

Particulars. (1)	Number of Defects			Number of Prosecutions. (5)
	Found [2]	Remed'd [3]	Referred to H.M. Inspector [4]	
Nuisances under the Public Health Acts :—*				
Want of cleanliness.. .. .	2	2	—	—
Want of ventilation.. .. .	2	2	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other Nuisances	14	14	—	—
Sanitary accommodation { insufficient	—	—	—	—
{ unsuitable or defective	3	3	—	—
{ not separate for sexes	—	—	—	—
Offences under the Factory and Workshop Act:—				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	29	29	—	—
Other Offences (excluding offences relating to outwork which are included in Part 3 of this Report)	—	—	—	—
Total	50	50	—	—

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Acts as remediable under the Public Health Acts.

3. HOME WORK.

NATURE OF WORK.*	OUTWORKERS' LISTS, SECTION 107.										OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.					Prosecutions.					Instances.	Notices served.	Prosecutions.	Instances.	Orders made (s. 110).	Prosecutions (s. 110).
	Sending twice in the year.					Failing to keep or permit inspection of lists.										
	Outworkers + Con- tractors		Outworkers + Con- tractors		Sending once in the year.		Outworkers + Con- tractors		Failing to keep or permit inspection of lists.							
(1)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Wearing Apparel—																
(1) making, etc. ..	40	42	93	6	4	32	—	—	—	—	—	—	—	—	—	—
[2] cleaning & washing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Furniture& upholstery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ..	40	42	93	6	4	32	—	—	—	—	—	—	—	—	—	—

INSTRUCTIONS.—*If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 3 as the case may be) against the principal class only, but the outworkers should be assigned in columns 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

+ The figures required in columns 3 and 4 are the total number of the lists received from those employers who comply strictly with the statutory duty of sending two lists each year and of the entries of names of outworkers in those lists. The entries in column 2 must necessarily be even numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworker's name will often be repeated.

4. REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.		Number.		5. OTHER MATTERS.		Number 2
1	2	1	2	Class.		
Bakehouses	56	Matters notified to H.M. Inspector of Factories:— Failure to affix Abstract of the Factory and Workshop Act, (s. 133) Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act, (s. 5) Other		10
Confectioners	49			5
Laundries	52			
Other Workshops..	320			
Total number of workshops on Register ..		476		Underground Bakehouses (s. 101):— Certificates granted during the year In at the end of the year		None 37

These matters were attended to at the time.

None

None

37

THE MIDWIVES ACT, 1902.

In connection with the carrying out of the provisions of this Act, the usual routine was carried out during the year, viz: visiting the homes of midwives, interviewing them in connection with their work and explaining the provisions of the Act and the rules laid down for their guidance by the Central Midwives Board.

During the year 1915, 78 midwives entered their names on the local register as practising in the borough, being 4 less than last year, but names are constantly being added to the roll. Of the above 78, nine of them subsequently left the district, and their names have been removed from the register accordingly. 14 midwives gave notice of change of address, and one had her name taken off the register at her own request. Two were reported to the Central Midwives' Board and two were struck off the Roll.

During the year I received sixteen complaints against midwives. All of these were carefully investigated, and in twelve cases the midwives in question interviewed, and 32 complaints were investigated by the Inspector of midwives. The Inspector also interviewed 15 midwives on minor matters where no complaint had been made.

Notices were received from midwives of 62 still births (30 male and 32 female) having occurred; and 418 cases were notified in which medical aid had been called in, as against 345 last year.

The Inspector of midwives paid 257 visits of inspection to midwives, and I also inspected the bags and registers of a small number.

I received great assistance in connection with enquiries under this Act from the Female Health Visitors of the Birkenhead Society for the Prevention of Cruelty to Children, who work in conjunction with the Health Department by special

arrangement, and a number of reports were made by them to me in important cases.

80 cases of unnotified births occurred. 42 of these were attended by medical practitioners, 7 by certified midwives, 2 by uncertified handy-women, 11 by the Maternity Hospital Authorities, and 18 by the Union Authorities.

NOTIFICATION OF BIRTHS ACT, 1907.

This Act was adopted in the Borough on January 3rd, 1912, and three women Health Visitors were appointed in connection with carrying out the work.

No. of births notified during the year	...	...	3981
No. of births attended by medical practitioners	...	...	949
„ „ by midwives...	...	...	2810
„ „ in Maternity Hospital	...	...	187
„ „ in Union Infirmary...	..	...	35
Total number of stillbirths for the year	...	...	118
Of these Medical Practitioners notified	...	...	43
Maternity Hospital	„	...	11
Union Infirmary	„	...	2
Midwives	„	...	62

The following is a record of the cases visited by the women Health Visitors during 1915, viz. :—

2951 first visits were paid to the homes.

5221 re-visits were made.

4585 visits were made to children over 1 year and under 5 years.

2026 infants were found to be breast fed.

61 infants were breast and artificially fed.

100 infants were fed on artificial foods.

Medical attention was advised in 240 cases and 91 cases of ophthalmia and 162 cases of slight inflammation of the eyes were carefully watched and recovery resulted in each case.

91 cases of Ophthalmia Neonatorum were notified.

101 enquiries were made in illness from diarrhoea, and also in 79 cases where death from diarrhoea had occurred.

48 cases of nuisances were reported to the Public Health Department. 19 cases were referred to the Charity Organisation Society, and 7 cases reported to the Society for the Prevention of Cruelty to Children.

3 cases were sent to the school clinic and 15 to the Tuberculosis Dispensary.

9 cases were reported to the Medical Officer to the Mental Deficiency Committee.

The Ladies' Committee of the Society for the Prevention of Cruelty to Children with whom we work jointly in regard to the Health Visitors, have allowed extra nourishment in the case of 109 children, and milk and cereals to 64 nursing mothers.

6 children were sent to a convalescent home.

896 cases were visited for the Soldiers and Sailors Families' Association.

This voluntary and extra work has been very cheerfully undertaken by the Health Visitors, and the Committee have reason to believe that the work is much appreciated by the Association.

INFECTIOUS DISEASES (PREVENTION) ACT, 1890.

79 Public Library and 7 School Library books were collected from infected houses and disinfected, and two books were destroyed.

CLEANSING OF PERSONS ACT, 1897.

6 soldiers were cleansed under the provisions of this Act, at the special bath provided for this purpose at the Disinfecting Station in Corporation Road, and their clothing disinfected.

SEIZURE AND DESTRUCTION OF UNWHOLESOME MEAT, FISH AND VEGETABLES.

The Meat and Food Inspector has furnished the following particulars of meat, &c., unfit for human food, seized and destroyed during 1915.

Of the total weight of the meat destroyed, some was voluntarily surrendered by the butchers, they having called the Inspector's attention to it.

As in all recent years, a considerable proportion of the meat taken was on premises in connection with the Foreign Animals Wharf, Woodside. The total number of animals dealt with here was much less than in previous years, viz: 100,201 oxen and 1187 sheep as against 149,144 oxen and 10,171 sheep in 1914.

The total number of animals killed was as follows, viz:

AT WOODSIDE LAIRAGE.

	Oxen	Sheep
Foreign (United States) ...	...	...
Irish	100201	1187
Total	100201	1187

AT WALLASEY LANDING STAGE AND No. 4 SHED, WALLASEY LAIRAGE.

	Oxen	Sheep
Canadian and American ...	...	...
Irish	258	329

AT THE BIRKENHEAD ABATTOIR, NEW CHESTER ROAD.

Oxen, 1735; Sheep, 3583; Lambs, 4389; Calves, 301;
Pigs, 5828; the total number of animals killed being 15,836.

STATEMENT OF TOTAL SEIZURES

For the Year 1915.

Total number of—

Carcases seized during 1915 ... 327, weighing 123,111 lbs.

Immature Calves seized during 1915 359, weighing 10,749 lbs.

Total... 686, weighing 133,860 lbs.

Parts of Carcases seized weight 14,268 lbs.

Offal seized ,, 141,389 lbs.

Of the above, the number of carcasses seized at—

	Beasts	Sheep&Lambs	Calves	Goats	Immature Calves	Pigs
Woodside—Foreign...	...	...	...	...	...	...
„ Irish ...	117	1	...	...	359	...
Abattoirs ...	15	2	...	...	...	16
Wallasey Stage ...	123	36	...	1	...	13
Wallasey No. 4 Shed	...	2	...	...	...	...
Wallasey No. 5 ...	...	...	...	...	...	1
	255	41	...	1	359	30

Parts of carcasses seized at—

Woodside—Foreign ... weight — lbs.

„ Irish ... ,, 13953 lbs.

Abattoirs ,, 315 lbs.

Wallasey Stage ,, — lbs.

Wallasey No. 4 Shed ,, —

14268 lbs.

In addition to the above the following articles were seized,
viz. :—

Market Hall ...	Bacon ...	...	1 lbs.
Shops ...	Tripe ...	...	17 lbs.
	Offals ...	...	20 lbs.
	Meat ...	...	19 lbs.
	Strasbourg and other shellfish...	...	11 lbs.
Pacific Road and other premises—			
	Offal ...	...	2712 lbs.
Total weight ...			<u>2780 lbs.</u>

Calves.—The “Maintenance of Live Stock Order, 1915,”
came into operation on the 23rd of August.

Tuberculosis in the Animals.

The following is a Statement of the number of cases dealt
with during the year 1st January to 31st December, 1915.

	WOODSIDE & WALLASEY STAGE.		THE ABATTOIRS.			
	No.	Weighting lbs.	Cattle		Pigs	
			No. lbs.weight		No. lbs.weight	
FOREIGN CATTLE -						
No. where whole carcase was taken	—	—	—	—	—	—
No. where part only was taken....	—	—	—	—	—	—
No. where offal only was taken ..	—	—	—	—	—	—
	—	—	—	—	—	—
IRISH CATTLE—						
No. where whole carcase was taken	107	47570	12	5980	5	465
No. where part only was taken....	141	13953	5	315	8	94
No. where offal only was taken ..	121	12100	7	680	2	—
No. where small offal was taken ..	32	950	2	58	—	—

Actinomyces at Woodside.

3 cases, heads or tongues or both, 88 lbs.

**PROCEEDINGS TAKEN UNDER THE "SALE OF FOOD AND
DRUGS ACTS, 1875 to 1907."**

The Chief Inspector (Mr. William Dawson) gives the following summary of proceedings taken under these Acts during 1915.

During the twelve months ending the 31st December, 1915, the following samples were taken and analysed, viz.:—

				Samples taken formally.		Samples taken informally.
Milk	...	...	...	123	...	—
Butter	...	...	...	43	...	11
Lard	...	...	...	13	...	—
Cheese	..	...	...	12	...	—
Sweets	...	...	...	12	...	—
Bread	...	...	...	9	...	—
Coffee	...	...	...	7	...	—
Beer	...	...	...	6	...	—
Margarine	...	...	...	3	...	2
Cream	...	...	...	2	...	3
Scotch Whisky	...	...	...	4	...	—
Glycerine	..	...	...	4	...	—
Am. Tincture of Quinine...				4	...	—
Olive Oil	...	...	...	4	...	—
Irish Whisky	...	...	...	3	...	—
Castor Oil	...	...	...	2	...	—
Camphorated Oil	...	...	...	2	...	—
Epsom Salts	...	...	...	2	...	—
Rum	...	...	...	2	...	—
Malt Vinegar	...	...	...	2	...	—
Pepper	...	...	...	2	...	—
Honey	...	...	...	—	...	2
Rice	...	...	...	—	...	2
Gin	...	..	...	1	...	—
Port Wine	...	...	...	1	...	—
Brandy	...	...	...	1	...	—
Raspberry Jam	...	...	...	—	...	1

Strawberry Jam	...	...	—	...	1
Black Currant Jam	...	...	—	...	1
Damson Jam	...	...	—	...	1
					<hr/>
					264
					<hr/>
					24
					<hr/>

Total samples analysed during year...288

Out of the above, 32 samples of Milk, 4 of Butter, 1 of Coffee, and 1 of Ammoniated Tincture of Quinine were reported adulterated, and proceedings were taken in respect of 23 samples of Milk, 4 of Butter and 1 of Coffee.

With reference to the remaining samples reported adulterated the Health Committee considered it was inadvisable to institute proceedings, and the particulars of the respective cases, and the circumstances which determined the Committee's decision are as follows, viz. :—

Milk samples No. 12, 13, 31 and 34.

In these cases the milk was reported to be deficient in fat to the extent of 4 per cent, 5 per cent, 4 per cent and 5 per cent respectively, and as the amounts were small the vendors were given an opportunity of furnishing explanations to the Health Committee, and they were subsequently cautioned.

Am. Tincture of Quinine Sample No. 105.

This sample was reported to be deficient in Quinine Sulphate to the extent of $10\frac{1}{2}$ per cent.

An explanation in writing was submitted by the vendor, and after due consideration by the Health Committee it was accepted.

Milk samples No. 110 and 146.

Each of these two samples were reported to be deficient in fat to the extent of 2 per cent, and the amount being small, it was decided to caution the vendors.

Milk Samples No. 245, 257 and 258.

In these cases the Milk was reported to be adulterated with water to the extent of 4 per cent, 4 per cent and 2 per cent respectively. The vendors were afforded an opportunity of furnishing explanations, which after consideration were accepted.

Informal Samples.

Out of the samples taken informally for analysis during the year, the following were reported adulterated :—

Butter Samples Nos. 14, 22, 40, 92, 93, 161 and 162.

These samples were reported to be Margarine. Formal samples were taken which, upon analysis, were found to correspond. Court proceedings were instituted against the vendors in respect to the formal samples.

The particulars respecting the samples in which proceedings were taken are as follows :—

Quarter Ending	Article.	No.	Amount of Adulteration.	Fine Inflicted.	Costs Imposed.
1915.				£ s. d.	£ s. d.
March 31	Milk ..	24	12 0/0 of added water ..	Dismissed upon payment of costs ..	0 14 6
	Butter ..	25	79.02 % of foreign fats	2 10 0 ..	1 5 6
	Milk ..	28	11.7 0/0 of added water	0 10 0	0 17 0
	Milk ..	49	Deficient in fat to the extent of 21 0/0 ..	1 0 0	including costs
	Milk ..	50	Deficient in fat to the extent of 14 0/0 ..	1 0 0	including costs
	Milk ..	60	Deficient in fat to the extent of 7 0/0 ..	1 0 0	including costs
	Coffee ..	82	Addition of 90 0/0 of Chicory ..	0 16 0	including costs
June 30	Milk ..	88	Deficient in fat to the extent of 16 0/0 ..	Dismissed upon payment of costs ..	0 14 6
	Milk ..	90	Deficient in fat to the extent of 5 0/0 ..	Dismissed upon payment of costs ..	0 14 6
	Milk ..	91	Deficient in fat to the extent of 8 0/0 ..	Dismissed upon payment of costs ..	0 14 6
	Butter ..	101	78.07 % of foreign fats For Obstruction of Officer	20 0 0 5 0 0	including costs ditto
	Milk ..	125	Deficient in fat to the extent of 3 0/0 ..	Dismissed	
	Milk ..	127	Deficient in fat to the extent of 10 0/0 ..	Dismissed	
	Milk ..	137	Deficient in fat to the extent of 25 0/0 ..	1 0 0	including costs
	Milk ..	139	Deficient in fat to the extent of 8 0/0 ..	0 4 0	including costs

Quarter ending	Article	No.	Amount of Adulteration	Fine Imposed	Costs Imposed
1915					
June 30th	Milk ..	144	Deficient in fat to the extent of 6 % ..	Withdrawn	
	Milk ..	145	Deficient in fat to the extent of 13 % ..	Dismissed	
	Milk ..	147	Deficient in fat to the extent of 8 % ..	Withdrawn	
September 30.. ..	Butter ..	163	80.63 % of foreign fats Unlabelled Margarine Unstamped Wrapper	3 0 0 2 0 0 2 0 0	including costs
	Milk ..	188	Deficient in fat to the extent of 18 % ..	2 0 0	including costs
	Milk ..	189	6 % added water ..	Dismissed upon payment of costs	0 15 6
	Milk ..	194	Deficient in fat to the extent of 15 % ..	Dismissed	
	Milk ..	197	7 % added water	5 0 0	including costs
	Milk ..	199	7 % added water	5 0 0	including costs
	Milk ..	200	6 % added water	Dismissed upon payment of costs	0 15 6
December 31 .. .	Milk ..	203	2 % added water	1 0 0	including costs
	Milk ..	204	4 % added water	1 0 0	including costs
	Butter ..	207	44 % of foreign fats .. Unstamped wrapper ..	3 0 0 1 0 0	including costs

Milk samples Nos. 24 and 28.

In connection with these two samples it may be explained that sample No. 24 was purchased from a small dairy in the Borough, and sample No. 28 from a dealer in course of delivery to the dairy.

When the cases came before the Court the summons against the shopkeeper was dismissed upon payment of costs ; the dealer, however, was convicted and fined 10/- and 17/- costs.

Milk Samples Nos. 88, 90 and 91.

In the case of these samples, No. 88 was purchased from a milk-dealer, and Nos. 90 and 91 from small shopkeepers supplied by the milk-dealer.

After hearing the evidence, the Magistrates decided to dismiss the cases against the defendants on payment of costs in each case of 14/6.

Milk Samples Nos. 125 and 127.

Sample No. 125 was purchased from a local shopkeeper, and No. 129 was taken in course of delivery from a farmer to the said shopkeeper.

The Magistrates, after hearing the evidence, dismissed both cases.

Milk Samples Nos. 144, 145 and 147.

These three samples were taken in course of delivery from a farmer to a local dairyman.

When the cases came before the Court it was suggested that as the three samples formed part of one consignment the summonses in connection with Nos. 144 and 147 should be withdrawn, and proceedings be continued only in the case of No. 145.

After hearing the evidence, the Magistrates dismissed the case against the defendant.

Milk Samples Nos. 189 and 200.

In connection with these samples, it may be explained that sample No. 189 was purchased from a local shopkeeper in the Borough, and sample 200 was taken in course of delivery from a dealer supplying the shopkeeper.

When the cases came before the Court the Magistrates dismissed both summonses.

Milk Sample No. 194,

This sample was purchased from a local dairy, and after hearing the evidence the Magistrates dismissed the case against the defendant.

PUBLIC HEALTH (Milk and Cream) REGULATIONS, 1912.

Report for the year ended 31st December, 1915.

1. Milk, and Cream not sold as Preserved Cream.

	(a) Number of sam- ples examined for the presence of a preservative.	(b) Number in which a preservative was reported to be present.
Milk ..	123	—
Cream ...	1	1

(b) With reference to the sample of Cream reported to contain Boric Acid and sold contrary to the provisions of the Regulations, the vendor was afforded an opportunity of furnishing an explanation in writing. After duly considering the explanation and all the circumstances in connection therewith, the Local Authority decided to caution the vendor.

2. Cream sold as Preserved Cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservative were correct:—

(1) Correct statements made	...	4
(2) Statements incorrect	...	0
		—
Total	...	4
		—

(b) Determination made of Milk fat in Cream sold as Preserved Cream :—

(1) Above 35 per cent	...	4
(2) Below 35 per cent	..	0
		—
Total	...	4
		—

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed :—

Article V. (1)	...	...	...	nil
Article V. (2)	...	...	...	nil

(d) Particulars of each case in which the Regulations have not been complied with and action taken :— Nil.

3. Thickening Substances.

The Public Analyst has not found any evidence of the addition of any thickening substance to the samples of Cream or Preserved Cream which have been analysed.

4. Other observation, if any.

Nil.

Composition of Milk Samples.

The following Schedule shews the composition of each sample of milk analysed during the year ending, 31st December, 1915.

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of Solids not Fat.
Jan. 4	2	4.03	8.85
	4	3.93	8.89
13	6	3.20	8.67
	7	3.38	8.78
	8	3.07	8.74
	9	3.40	9.11
	10	4.56	8.97
	11	3.97	8.90
19	12	2.88	8.94
	13	2.85	8.82
29	24	2.60	7.48
Feb. 2	28	2.90	7.51
	8	3.46	8.95
16	30	3.20	8.91
	31	3.55	8.73
	32	2.88	9.05
	33	3.07	8.98
	34	2.85	9.01
	35	3.15	9.03
	36	3.90	8.95
	37	3.86	9.08
	38	5.17	8.66
	39	3.80	8.65
Mar. 3	42	3.40	8.92
	44	4.67	8.11
10	46	3.95	8.51
	47	3.39	8.60
	48	3.10	8.92
	49	2.37	8.57
	50	2.58	8.84
16	52	3.15	9.07
	53	3.00	8.62
18	54	3.12	8.97
22	55	3.90	8.56
	56	5.03	8.61
	57	3.63	9.05
	58	3.35	8.89
	59	3.20	9.17

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of Solids not Fat.
Mar. 22	60	2.79	8.85
24	61	3.09	8.91
	62	3.00	8.63
	63	4.62	8.91
	64	3.63	8.86
	65	3.05	8.80
	66	3.70	8.50
26	67	3.66	8.68
April 14	86	3.73	8.79
	87	3.36	8.80
	88	2.52	8.84
	89	3.50	8.50
	90	2.85	8.62
	91	2.76	8.49
20	94	3.00	8.77
	95	4.32	8.50
22	96	3.66	8.84
	97	3.57	8.64
	98	4.02	8.65
	99	4.00	8.67
	100	3.20	8.57
May 19	110	2.94	8.65
	114	3.52	8.99
26	115	3.08	8.74
	120	3.19	8.91
28	122	4.59	8.99
	123	3.30	9.17
	124	3.58	8.89
	125	2.91	9.43
	126	3.69	8.99
June 2	127	2.70	9.01
11	135	3.03	8.75
	136	3.17	8.57
	137	2.25	8.92
	138	3.15	8.91
	139	2.76	8.64
	140	3.37	8.40
16	144	2.82	9.04
	145	2.61	8.79
	146	2.94	8.74
	147	2.76	8.95
June 17	148	3.17	8.95
Sept. 22	185	3.30	8.86

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of Solids not Fat.
Sept. 22	186	2.46	8.64
	187	3.95	8.74
	188	3.68	8.85
	189	3.38	7.99
	190	3.26	9.07
24	191	3.72	8.53
	192	3.41	8.51
	193	3.86	8.70
	194	2.55	9.23
28	197	3.72	7.91
	198	3.25	8.90
	199	3.07	7.90
29	200	3.00	7.96
	201	3.00	8.61
30	202	3.89	9.24
Oct. 5	203	3.20	8.30
	204	3.53	8.14
16	205	3.70	8.66
22	206	3.80	8.66
Nov. 22	226	3.47	9.06
	227	5.36	9.15
	228	3.34	8.63
	229	4.12	8.88
	230	4.37	9.01
	231	3.69	9.48
23	232	3.69	9.01
	233	3.60	8.95
	234	4.16	8.94
	235	3.71	8.95
	236	3.68	9.16
	237	3.82	9.00
30	245	3.47	8.16
	246	3.54	9.18
	247	4.22	8.56
	248	3.27	9.22
	249	3.56	8.85
	250	4.13	8.89
Dec. 7	257	3.59	8.17
	258	3.42	8.33
14	271	4.25	8.71
	272	3.97	8.76
	273	3.91	8.58

AVERAGE PERCENTAGE:—Fat, 3.45; Solids not Fat, 8.72

Contagious Diseases (Animals) Act, 1886.

The Milkhouses.—The regulation of dairies, cowsheds, and milk-shops, and the supervision of milk-sellers, has had systematic attention for a number of years. Special care is taken that the ventilation, lighting, cleansing, draining, and water supply of premises used for milk-trade are thoroughly efficient. The register of milk-sellers is revised week by week. The total number of milk-shops is 195, in addition there are 40 purveyors of milk, 10 cowsheds, and 41 farmers resident outside the Borough, registered to purvey milk inside the Borough.

Twice every year notice is sent to all the milk-sellers requiring that the walls and ceilings of every room in the occupation of Registered Milk-sellers, used for storage or sale of milk, shall be lime-washed, that is to say, in March and September; but if the walls are painted, then they must be washed and thoroughly cleansed twice every year, in March and September.

Meteorological Results.

The noteworthy features of the meteorology of the year are given in the following tabular statement, which has kindly been prepared by W. E. Plummer, Esq., M.A., F.R.A.S., Director of the Observatory, Bidston Hill, Birkenhead, who also furnishes particulars weekly of the daily observations taken under his directions, from which Table IV. in the appendix is compiled.

LIVERPOOL OBSERVATORY, BIDSTON, BIRKENHEAD.

1915				Mean Tempera- ture	Mean Barometer	Rainfall 1 ft. above ground
				° F	Inches	Inches
January	..	..	..	40.5	29.588	3.100
February	..	..	..	39.9	29.534	2.482
March	..	..	..	41.7	29.997	1.008
April	..	..	..	46.8	30.067	1.342
May	..	..	..	51.6	30.073	1.311
June	..	..	..	58.7	30.046	0.796
July	..	..	..	58.3	29.862	2.733
August	..	..	..	59.2	31.006	4.776
September	..	..	..	56.9	30.006	0.444
October	..	..	..	48.6	30.037	2.244
November	..	..	..	38.6	29.966	2.098
December	..	..	..	41.9	29.552	4.493

Mean Barometer for the whole year 1915=29.978 inches.

Mean Barometer for the past 45 years=29.923 inches.

Number of wet days in the year 1915=177 days.

Total amount of rainfall at Bidston, 1915=26.827 inches.

Average rainfall for last 45 years=28.485 inches

Mean Temperature for 1915=48.5

Barometer.—The mean barometer of 1915 (29.978 inches) was higher than last year and 0.055 higher than the average mean for the last 45 years. Detailed particulars respecting the barometric pressure, temperature, rainfall, wind, humidity of the air and the proportion of cloud to clear sky &c., will be found in Table IV.

Rainfall.—The rainfall of 1915, 26.827 inches, was higher than last year, but lower than the average of the previous forty-five years.

The figures for the years 1867—1899 are given in my Report for 1904, and those for the years 1901—1914 in my Report for the latter year.

WATER SUPPLY.

The water supply of the Borough is from deep wells in the old red sandstone, and is of excellent quality.

The following Report, kindly supplied by the Water Engineer, is of interest:—

COUNTY-BOROUGH OF BIRKENHEAD.

Year	Actual Consumption for Trade and Municipal Purposes (Measured)	Actual Consumption for Domestic and Miscellaneous Purposes	Estimated Population of Water Area-Borough Less Oxtion and Plus Bidston, Oxtion being supplied by the Wirral Water-works Co.	Average Rate per head per day for Domestic and Miscellaneous Purposes	Average Rate per head per day for Trade and Municipal Purposes	Average Rate per head per day for all purposes
	Gallons	Gallons		Gallons	Gallons	Gallons
Census						
1901	367,138,300	846,741,067	103,830	22.34	9.68	32.02
1902	377,023,300	913,095,025	104,920	23.84	9.84	33.68
1903	374,347,700	925,821,229	106,030	23.92	9.67	33.59
1904	424,957,500	869,131,415	107,142	22.22	10.87	33.09
1905	429,387,300	924,670,661	108,265	23.39	11.12	34.51
1906	415,546,500	908,459,872	109,400	23.75	10.40	33.15
1907	434,224,200	954,838,547	110,547	23.16	10.76	33.92
1908	433,127,900	976,024,612	111,706	23.86	10.60	34.46
1909	404,570,200	1021,386,718	112,877	24.79	9.82	34.61
1910	385,449,120	981,076,547	114,061	23.56	9.25	32.81
Census						
1911	398,116,720	959,355,666	123,397	21.30	8.83	30.13
1912	411,815,000	1043,418,295	125,716	22.81	8.97	31.78
1913	470,213,400	1068,392,097	128,036	22.86	10.06	32.92
1914	488,145,100	1049,386,456	130,486	22.03	10.25	32.28
1915	526,891,770	1114,671,452	132,939	22.97	10.86	33.83

Water Engineer's Office,
52 Balls Road, Birkenhead,
June 30th, 1915.

(Signed) J. W. M. RICHARDSON,
Borough Water Engineer.

PREVALENCE OF ZYMOTIC SICKNESS DURING 1915.

Notification of Cases of Dangerous Infectious Diseases.—The Infectious Disease (Notification) Act, 1889, requires householders and medical men in attendance to notify cases of dangerous infectious diseases to the Sanitary Authority, and gives facilities for supplementing the statement of the mortality from zymotic diseases, month by month, as they were reported. The diseases which require to be notified to the Authority as “dangerous infectious diseases” are:—

Small-pox.	Fevers	Typhus.
Scarlatina.		Typhoid.
Diphtheria.		Continued.
Membranous Croup.		Relapsing.
Erysipelas.		Puerperal Septicæmia.
Cerebro Spinal Meningitis.		Acute Poliomyelitis.
		Cholera.

The cases notified appear in the following return, showing that 521 cases were notified during the year, being 100 less than the number notified last year.

The notification of Measles was discontinued after 7th August, 1907.

The following Table gives the number of Notifications of Dangerous Infectious Diseases in each month of the year.

1915.	Smallpox	Scarlatina	Diphtheria	Typhus	Typhoid	Puerperal Fever	Fever	Mem. Croup	Erysipelas	Poliomyelitis	Cerebro Spinal Men.	Cholera	TOTAL
January	29	9	..	2	..	..	2	9	..	1	..	..	52
February	18	7	..	..	1	..	..	6	..	1	..	..	33
March	7	3	..	2	..	..	..	13	..	..	..	..	25
April	14	5	..	2	..	..	..	9	..	..	..	..	30
May	19	8	..	2	..	..	..	7	..	..	..	..	36
June	45	11	..	2	2	..	..	2	..	..	..	..	62
July	29	5	..	..	..	..	..	4	..	1	..	..	39
August	29	1	..	5	3	..	..	5	..	..	..	..	43
September ..	27	10	..	3	..	..	..	16	..	..	..	..	56
October	32	3	..	1	3	..	1	11	1	..	..	..	52
November....	31	6	..	..	1	..	..	13	..	..	..	..	51
December....	19	8	..	1	2	..	1	10	..	1	..	..	42
Total..	299	76	..	20	12	..	4	105	1	4	..	..	521

The figures for the years 1882-1903 will be found at page 25 in my report for 1905, and for 1904-1914 on page 59 in my report for 1914.

MILITARY AND NAVAL CASES OF INFECTIOUS DISEASES

notified during the year ended 31st December, 1915.

16 Military and 2 Naval cases were notified during the year,
viz :—

Scarlet Fever ...	...	...	...	4
Diphtheria ...	...	...	...	4
Typhoid Fever ...	...	...	...	4
Erysipelas ...	...	...	...	3
Measles ...	...	...	...	1
German Measles ...	...	...	...	1
Chickenpox ...	...	...	...	1

Of the above, the case of German Measles turned out to be Scarlet Fever, and 2 cases of Diphtheria and 1 case of Typhoid Fever were found not to be such.

Tuberculosis.

In addition, 8 Military and 1 Naval cases of Pulmonary Tuberculosis were notified during the year.

SMALL-POX.

No cases of Smallpox were notified during the year.

I am indebted to the Borough Surveyor for the following information relating to the

Number of New Houses erected in the Borough,

April 1st, 1911, to December 31st, 1913	...	814
January 1st to December 31st, 1914	...	246
„ „ 1915	...	136

The number of houses demolished since taking of Census in 1911 was 164, a net gain of 1032.

The following table gives particulars respecting Erection of New Houses and Demolition of Houses in the Borough during each year from 1892 to 1915 :—

Year		New Houses Erected	Houses Demolished	Net Increase
1892		99	...	...
1893	Average	108	...	...
1894	per year	139	...	...
1895	130	175	...	...
		<hr/> 521	<hr/> 81	<hr/> 440
1896		255	8	247
1897		349	6	343
1898	Average	438	125	313
1899	per year	434	28	406
1900	385·9	408	81	327
1901		420	66	354
		<hr/> 2304	<hr/> 314	<hr/> 1990
1902		646	10	636
1903		897	10	887
1904	Average	643	8	635
1905	per year	848	152	696
1906	677·3	472	35	437
1907		685	14	671
1908		550	52	498
		<hr/> 4741	<hr/> 281	<hr/> 4460

[Carried forward

		Erected	Abolished	Net Gain
1909		293	77	216
1910		255	7	248
1911	Average	232	9	223
1912	per year	273	44	229
1913	253	339	67	272
1914		246	18	228
1915		136	*32	104
		<hr/>	<hr/>	<hr/>
		1774	254	1520
		<hr/>	<hr/>	<hr/>
	TOTALS...	9340	930	8410
		<hr/>	<hr/>	<hr/>

*This includes 26 back to back houses converted into 13 through houses.

VITAL AND MORTAL STATISTICS FOR THE YEAR

Area.—The Borough has an area of 3850 acres, or a little more than six square miles.

Population.—The Census was taken in England and Wales on April 2nd, 1911, and showed the number of persons in Birkenhead to be 130,794, being 19,879 more than the number shown in the Census taken on April 1st, 1901.

For the purposes of this Annual Report an estimate is required of the number of persons living at Midsummer, 1915, and I have estimated that on the 30th June of that year the population was 140,291, and on this estimate have based the following statistics.

At the time of the 1901 Census the number of inhabited houses was 19,744, giving an average number of persons per house of 5·6; the number of houses in the Borough at the time of the 1911 Census was 24,343 giving an average number of persons per house of 5·3.

I am indebted to the Chief Constable for the following Return of uninhabited property in the Borough of Birkenhead for the half year ending 31st December, 1915 :—

District	Half-year ended 31st Dec., 1915.					Half-year ended 30th June, 1915.				
	Private Houses	Shops	Cot-tages.	Dock Cot-tages	Total	Private Houses	Shops	Cot-tages	Dock Cot-tages	Total
Birkenhead ..	60	54	3	..	117	72	71	6	..	149
Clughton and Oxta ..	101	23	..	68	192	88	18	..	72	178
Tranmere and Bebington..	36	49	3	..	88	69	46	7	..	122
Totals	197	126	6	68	397	229	135	13	72	449

Total uninhabited and unoccupied property, 31st December, 1914, was 517, so there was a decrease of 120 at the end of 1915, as compared with the previous year.

DWELLING HOUSES, &c.

The approximate estimate of dwelling-houses of all descriptions within the Borough, including Institutions, at 31st December, 1915

26,824

The approximate estimate of schoolrooms, warehouses, &c.

1225

Births and Deaths in Birkenhead.—During the year 1915 the returns of the local registrars recorded 3871 births and 2193 deaths in the Borough of Birkenhead. The natural increase in the population in 1915 was therefore 1651. Of the births 1995 were males and 1876 were females; of the deaths 1167 were males and 1026 were females.

Further particulars as to the births and deaths in the Borough registered in each quarter of the year, and in each township are given in the subjoined table. Those occurring in Union Work-house are entered separately. Twenty-seven births have been subsequently transferred by the Registrar General to other districts. These have not been deducted in the following table,

but 7 births sent to us by the Registrar General have been included. This table is made up week by week.

BIRTHS	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1915		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	332	281	311	297	287	271	274	230	1207	1083	2290
Claughton	21	19	19	23	17	22	20	11	77	75	152
Tranmere	157	184	180	153	158	159	155	154	650	650	1300
Oxton	6	7	6	6	3	5	2	5	17	23	40
Rebington	13	14	5	8	8	1	4	5	30	28	58
Union Hospital	2	6	4	2	6	5	2	4	14	17	31
Birkenhead Borough ..	531	511	525	4895	479	463	457	409	1995	1876	3871

DEATHS.	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1915		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	176	137	100	134	152	112	143	110	571	493	1064
Claughton	10	8	4	8	14	8	9	10	37	34	71
Tranmere	70	101	64	66	69	56	76	86	279	309	588
Oxton	7	8	5	2	5	2	4	2	21	14	35
Bebington	5	5	6	4	7	5	2	3	20	17	37
Union Hospital.....	74	43	61	39	47	26	57	51	239	159	398
Birkenhead Borough	342	302	240	253	294	209	291	262	1167	1026	2193

The next table shows the revised estimated population of Birkenhead, the density of population and the number of births, deaths and zymotic deaths, and also the birth and death rates deducible from these figures for the years 1900 to 1915. These figures for the years 1878 to 1899 were given in my reports for the years 1898 and 1899. This table has been revised since the figures of the 1911 census have been published.

Year	Revised Estimated Population at Midsummer	Persons per acre.	BIRTHS.		DEATHS.		ZYMOTIC DEATHS.	
			Number of Births	Birth rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum
1900	110,042	28.5	3428	31.1	1965	17.8	209	1.8
1901	111,377	28.9	3230	29.0	2061	18.5	353	3.1
1902	113,231	29.4	3646	32.1	1989	17.5	270	2.3
1903	115,117	29.9	3516	30.5	1937	16.8	260	2.2
1904	117,034	30.3	3805	32.5	2232	19.4	465	3.9
1905	118,982	30.9	3707	31.1	1833	15.4	239	2.0
1906	120,964	31.4	3733	30.8	2078	17.1	371	3.0
1907	122,978	31.9	3727	30.3	1829	14.8	253	2.0
1908	125,026	32.4	3775	30.1	1929	15.4	267	2.1
1909	127,108	33.0	3737	29.4	1930	15.1	180	1.4
1910	129,227	33.5	3730	28.8	1993	15.4	251	1.9
1911	131,377	34.1	3732	28.4	2107	16.0	304	2.3
1912	133,521	34.6	3774	28.2	1934	14.7	197	1.4
1913	135,740	35.2	3907	28.7	2032	14.9	205	1.5
1914	137,996	35.8	3772	27.3	2153	15.6	244	1.7
1915	140,291	36.4	3844	27.4	2193	15.6	211	1.5

On page 61 of my last year's report is a table giving the estimated populations of the Wards in the Borough from 1911—1920.

Infantile Mortality during 5 years, 1911 to 1915.

Year.	No. of Births.	Total Deaths of Infants under 1 year.	Deaths from Diarrhoea under 1 year.	Total Deaths of Infants per 1000 Births.	Deaths of Infants from Diarrhoea per 1000 Births.
*1911	3732	509	134	136	35.9
*1912	3774	371	20	98	5.2
*1913	3907	458	68	117	17.4
*1914	3772	462	36	122	9.5
*1915	3844	469	68	122	17.6

* This is the revised rate after the Registrar General has transferred births from other towns. It cannot be compared with other towns unless we had all their revised rates. The figures for 1904—1910 are on page 64 of my report for 1914.

Causes of Infantile Mortality during the past ten years
(1906 to 1915.)

Cause of Death.	YEARS.									
	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
Chicken-pox .....	..	..	1	2	..	..	..	..	4	1
Measles	1	42	11	7	7	5	7	2	12	2
Scarlet Fever .....	..	1	..	1	..	1	..	..	..	..
Diphtheria and Mem. Croup..	4	..	1	1	..	1	2	4	1	2
Whooping Cough	33	7	27	6	27	13	20	15	16	21
Diarrhoea	152	30	67	33	56	134	20	68	36	68
Enteritis	24	8	15	24	42	24	19	64	58	56
Gastritis	7	7	12	9	11	7	5	12	2	8
Premature Birth	68	61	81	58	65	53	60	50	67	64
Congenital Defects	13	12	17	15	18	24	17	15	17	23
Teething	5	6	2	4	5	7	4	6	4	2
Inanition and Privation	5	7	11	21	21	10	17	11	10	..
Debility	83	78	64	82	66	65	70	81	80	92
Tabes Mesenterica	9	10	11	15	5	5	1	2	2	1
Other Tubercular Diseases	9	9	12	12	16	14	8	10	8	7
Erysipelas	1	..	..	2	1	..	2	..	3	..
Syphilis	4	1	3	2	4	1	2	6	7	2
Rickets	1	2	..	2	..	1	..	1	1	..
Meningitis (not tuberculous) ..	11	7	11	9	5	7	6	5	5	2
Convulsions	23	18	15	13	21	18	9	14	14	11
Bronchitis	16	25	47	36	39	41	24	27	26	27
Pneumonia	45	35	51	55	50	40	31	33	64	49
Heart Disease	2	2	7	9	4	2	9	1	1	..
Suffocation, overlaying, etc. ..	5	9	16	10	8	7	13	8	10	8
Other Causes	44	33	34	30	36	29	25	23	14	23
Total Deaths per annum....	565	410	516	458	507	509	371	458	462	469
No. of Births per annum....	3733	3727	3775	3737	3730	3732	3774	3907	3772	3844
Death Rate per 1000 per annum per 1000 Births	151	110	136	122	135	136	98	117	122	122

Average Death Rate per 1000 per annum, per 1000 Births for the 10 years 1906 to 1915,
equals 125.

The Table shewing the comparative Birth and Death Rates in the great towns is omitted this year as the population of most of the towns has been greatly altered owing to the movement of troops and war workers during these special times, and the rates therefore would not be accurate or of any value.

The proportion of Deaths of Infants under One year to the Births registered.—The proportion in Birkenhead Borough in 1915 was equal to 122 per 1000, and compares very favourably with that of other towns.

Tabular Statements.—In the appendix to this Report are tabular statements of the year's mortality within the Borough, classified according to the diseases, ages and localities, a weekly register of deaths and of meteorological results, &c.

Table I. shows the deaths registered in the whole Borough during 1915, arranged with reference to the age at which death occurred in each case. They are disposed in four sub-tables—the deaths in the townships of Birkenhead and Claughton in the first, deaths in Tranmere (exclusive of the Union premises) and Oxton in the second, the deaths in the incorporated portion of Higher Bebington in the third, and the deaths in the Union Hospital and Workhouse in the fourth. The deaths of infants are entered up in three columns—those under one year, those of one year and under two years, and those turned two years and under five. Then follow the deaths of children and young persons, those turned five years and under twenty; and of adults those turned twenty and under forty, and those turned forty and under sixty. In the last two columns are the deaths of old people, those turned sixty and under eighty, and those of eighty and upwards. Reference to this table will show that, of the gross local mortality for 1915, the deaths of infants under one year of age accounted for 469, those over one year but under five years of age 238, children and young persons 122, adults 697, old people sixty years of age and upwards 667.

The relative proportion of deaths in 1915 among the infants, children and young persons, adults and old people, to the whole number of deaths, in certain sub-divisions of the borough, in the premises controlled by the Guardians of the Poor, and in the entire incorporated area, is readily shown in tabular form, thus:—

Percentage of Deaths at certain ages to Total Deaths.	Under 1 Year	Age between														85 years and upwards.
		1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75-85	
Birkenhead and Claughton	15.18	4.33	1.18	0.86	0.31	1.41	0.95	0.77	1.27	2.82	3.19	4.55	5.51	5.56	2.91	0.86
Tranmere & Oxtou	5.24	1.96	0.82	0.59	0.27	0.86	0.31	0.36	0.36	1.64	1.96	2.78	3.55	4.19	2.68	0.77
Bebington	0.13	..	..	0.04	..	..	0.09	0.04	..	0.13	0.09	0.18	0.27	0.18	0.36	0.13
Union Hospital and Workhouse	0.82	0.22	0.13	0.04	0.04	0.18	0.13	0.41	0.54	1.00	2.69	3.05	2.41	3.28	2.69	0.45
Birkenhead Borough	21.38	6.52	2.14	1.55	0.63	2.46	1.50	1.59	2.18	5.60	7.33	10.57	11.76	13.22	8.66	2.23

In this respect the local mortality compares favourably with the mortality in most great cities and boroughs. The percentages taken out for Bebington have little significance, the number of deaths being so small.

The following Table shows the Mortality of the different Wards :—

1915			Estimated Population at Midsummer 1915.	Deaths from All Causes		Deaths from Zymotic Diseases		Death rate per annum.	Infantile Death Rates per 1000 Living	No. of Deaths under 1 year
				M.	F.	M.	F.			
Cleveland	Ward	..	25449	210	175	24	15	15.1	3.7	96
Claughton	"	..	8586	37	34	1	1	8.2	1.2	11
Grange	"	..	28185	241	208	25	27	15.8	5.1	146
Argyle	"	..	16186	120	112	21	15	14.3	4.9	80
Oxtou	"	..	5134	21	14	1	1	6.8	..	..
Egerton	"	..	18439	89	98	7	9	10.1	1.6	30
Clifton	"	..	25649	123	142	12	11	10.3	2.0	53
Mersey	"	..	8852	67	69	10	9	13.8	3.2	32
Bebington	"	..	3811	20	17	3	1	9.7	0.7	3
Birkenhead Borough including deaths in Union premises			140291	1167	1026	110	101	15.6	3.3	469

The Registrar General states that the factor for correcting the general death rate for Birkenhead for the intercensal period, 1912—1921, is 1.0324.

Table II. is the weekly register of deaths in the Borough of Birkenhead for 1915. The deaths are entered into three sub-tables, representing Birkenhead; Claughton, Tranmere, Oxtou and Bebington, and the Union Hospital and Workhouse. Table III. is a summary of the weekly register of deaths. Table IV. is a Weekly Condensed Register of Meteorological Results.

The Classification of Death Causes.—The causes of death, as they appear in Tables I. and II. in the appendix, are systematically classified according to the principles laid down by the late Dr. W. Farr, the nosology being that adopted by the Registrar-General until within the last few years, which experience has shown to be well suited for statistical purposes. The death causes are arranged under classes and orders, the latter corresponding to the families of Natural History. Genera, or what in diseases would be varieties, are not distinguished. All death causes are thus conveniently classified under 140 heads, some of which however, include diseases very distinct from one another.

At the beginning of Table I. are the totals of deaths from all causes, and on the next line the totals of deaths from specified causes. The deaths which it is necessary to refer to unspecified causes are not only those ascribed in legal phraseology, to "visitation of God" or "natural causes," but those which, with almost equal vagueness, are classified as due to "tumour," "coma," etc. The deaths from specified causes are then divided into six classes. Class I. (the zymotic) embraces all diseases, either epidemic, endemic or contagious, which are induced by some specific body, or by want of, or by the bad quality of food. The diseases coming under Class II. (constitutional or cachetic) appear to be due to a bad habit of body, and possibly may sometimes be hereditary. Class III. takes in diseases the effects of which are manifest in disturbing or obliterating the function of particular organs or systems. Class IV. includes the conditions tending to produce death which are the incidental results of the formative, reproductive and nutritive processes. Class V. groups together all deaths which are the evident and direct result of physical or chemical forces. Class VI. Ill-defined Diseases.

Deaths from Zymotic Diseases. The deaths from zymotic diseases include 39 by what have been termed the chief zymotics (certain diseases belonging to the miasmatic order), viz., measles 7, scarlatina 4, diphtheria 16, membranous croup 3, fevers 1, and puerperal septicæmia 8. The remaining 172 were entered to

what have been called minor zymotics (diseases less prevalent, less fatal, or less obviously zymotic in character), viz., whooping cough 42, erysipelas 7, influenza 15, diarrhoea 92, syphilis 5, and other zymotic diseases 11.

Relative Fatality of Chief Zymotic Diseases.

The following table shows at a glance the relative fatality of the chief zymotic diseases for the year on the corrected estimate of population.

Year	Deaths from Zymotic Disease							Death rate per 1000 living.						
	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhoid Fever	Diarrhoea	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhoid Fever	Diarrhoea
1906	...	8	31	24	58	17	200	...	0.06	0.25	0.19	0.47	0.14	1.65
1907	...	129	10	21	16	11	42	...	1.04	0.08	0.17	0.13	0.08	0.34
1908	1	44	6	8	60	9	94	0.007	0.35	0.04	0.06	0.47	0.07	0.75
1909	...	41	17	14	15	5	42	...	0.32	0.13	0.11	0.11	0.03	0.33
1910	...	34	5	19	64	10	78	...	0.26	0.03	0.14	0.49	0.07	0.60
1911	...	23	5	21	31	8	194	...	0.17	0.03	0.15	0.23	0.06	1.47
1912	...	52	10	17	49	5	33	...	0.38	0.07	0.12	0.36	0.03	0.24
1913	...	8	4	20	41	1	100	...	0.05	0.02	0.14	0.30	0.007	0.73
1914	...	67	6	16	49	4	48	...	0.48	0.04	0.11	0.35	0.02	0.34
1915	...	7	4	16	42	1	92	...	0.04	0.02	0.11	0.29	0.007	0.65

Vaccination.—Mr. S. R. Carter, Clerk to the Board of Guardians of the Birkenhead Poor Law Union, has kindly supplied me with the following *latest completed* information relative to vaccination in the Birkenhead District, viz. :—

From 1st January, 1914, to 31st December, 1914.

No. of Births	...	...	...	...	...	...	...	3800
Successfully Vaccinated	...	...	...	...	...	...	...	2963
Insusceptible	...	...	...	...	...	...	...	21
Had Smallpox	...	...	...	...	...	...	...	None
Number in respect of whom Statutory Declarations of conscientious objection have been received	..	...	...	...	...	...	...	385
Died Unvaccinated	...	...	...	...	...	...	...	304
Postponed by Medical Certificate	...	...	...	...	...	...	...	30

Removed to Districts the Vaccination Officers of which were duly notified	... ..	17
Removed to places unknown or which cannot be reached		51
In Abeyance, up to 8th February, 1915	... ..	29

Taking 304 who died, and 68 who removed to other districts, 30 postponed by medical certificates, and 21 which were insusceptible, and 29 in abeyance, from 3800, it leaves 3348 children who could possibly be vaccinated. Of these 2963 were vaccinated, equal to 88 per cent.

It is to be regretted that 335 children were unvaccinated owing to objections on the part of the parents, a decrease of 52 on the previous year.

REPORT ON THE WORK OF THE TUBERCULOSIS DISPENSARY,

6 DUNCAN STREET,

During the year 1915.

Dr. Banks, the Tuberculosis Officer, is at present serving with His Majesty's Forces, and during his absence Dr. Fountain Browne is acting as locum tenens.

In the last annual report it was pointed out that the dispensary would only attain its *full* activities and usefulness when the remaining portions of the Corporation's arrangements for the treatment of Tuberculosis were complete, that is to say, when the Hospital at Thingwall and the Joint Sanatorium in the county were available. That statement remains true, but it is satisfactory to note that the work is progressing favourably. The beds at the Leasowe Sanatorium for Surgical Tuberculosis in Children are in constant occupation; and there is close co-operation between the Corkhill Charity and the Dispensary. Both these matters receive notice in special paragraphs on another page.

THE WORK OF THE YEAR 1915.

I am happy to say that cordial relations have continued to exist with the medical practitioners of the Borough, and also with the various agencies dealing with the sick poor.

The extent of the work carried out is indicated in the tables given below.

STATISTICS AS TO NOTIFICATION OF TUBERCULOSIS (all forms)
during 1915.

Total Notifications	785
Duplicates	335
<hr/>	
Primary Notifications...	450
<hr/>	

The Notifications were as follows:

Pulmonary	310
Brain	17
Glands	39
Bones and Joints	34
Peritoneum	33
Skin (Lupus)	5
Larynx (Primary)	2
Bladder	3
Kidney	1
Testes	1
General	5
Total Non-Pulmonary	140
<hr/>	
	450
<hr/>	

PULMONARY TUBERCULOSIS.

Cases in the Borough December 31st, 1914 ...	527
Cases notified during 1915... ..	310
<hr/>	
	837

*Died during 1915	...	...	...	158
Removed from Borough	...	...	...	51
Not traceable	...	...	...	19
Subsequently found not suffering...	...	...	...	26

254

Corrected total of known cases of Pulmonary
Tuberculosis living in the Borough,
December, 31st, 1915 ... 583

*This number differs from that in the Registrar-General's return on which death-rates are calculated, the latter containing a few transferable deaths from other districts.

INVESTIGATIONS INTO SOURCES OF INFECTION.

Of the 450 cases notified it was possible to secure information on this point in 388 cases,

Cases in which the diagnosis was subsequently found to be incorrect have been omitted,

	Pulmonary	Brain	Glands	Bones & Joints	Peritoneum	Skin (Lupus)	Primary Larynx	Bladder	Kidney	General
Known to have associated with a person suffering from the disease at home	61	3	6	2	5	1	1	0	0	1
Known to have associated with a person suffering from the disease at work	10	0	0	0	0	0	0	0	0	0
Family history of Tuberculosis, but patient not actually in contact	49	3	10	8	14	1	0	0	0	3
No family history of Tuberculosis, and no contact with any known case	143	9	20	14	19	2	1	1	1	0

INCIDENCE OF TUBERCULOSIS ACCORDING TO THE NUMBER OF ROOMS OCCUPIED BY THE FAMILIES.

The investigations detailed below refer to 377 households, at the time of the nurse's first visit.

No. in Family	No. Occupying									
	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	10 rooms
1	7	...	...	...	1	...	...	...	...	...
2	2	4	3	5	9	...	1	...	...	...
3	5	5	8	18	13	3	...	1	...	...
4	3	8	7	20	27	1	3	3	...	...
5	1	4	5	16	32	2	2	3	1	...
6	...	2	9	19	23	5	5	...	...	...
7	...	...	5	12	22	1	.	...	...	...
8	...	...	3	9	8	1	2	3	2	...
9	..	...	1	1	3	1	...	...	1	...
10	...	...	1	...	5	3	1	...	...	...
11	...	...	...	1	2	1	...	1	1	...
12	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	..	...	...	...	...	...

OCCUPATIONS FOLLOWED

By 238 cases at time of notification.

	Pulmonary	Non- Pulmonary	Died during the year
Bandsman
Boilermaker	1
Bookbinder	...	1	1
Book-keeper
Bottle-washer	2
Carpenter (Ship's)
Carter	...	2	6
Caulker	2
Charwoman	2
Chemist's Assistant	1
Clerk	...	1	3
Compositor

Coppersmith	...	...	...	1	...	...
Domestic servants	...	...	...	10	3	2
Draper's assistant	...	...	...	2	...	...
Dressmaker	...	...	...	1	...	...
Electrician	...	...	...	2	...	1
Engineer	...	...	...	2	...	...
Engine fitter	...	...	...	6	...	...
Fountain-pen engraver	...	...	...	...	1	...
Flatman	...	...	...	1	..	1
Foreman (Railway)	...	...	...	1	...	...
Gardener	...	...	...	1	...	1
Gravedigger	...	...	...	1	...	...
Grocer's assistant	...	...	...	1	...	1
Holder-up...	...	...	...	1	...	1
Housewives	...	...	...	57	2	18
Kinema operator	...	...	...	...	1	...
Joiner	...	...	...	2	1	2
Labourers—bricklayer	...	...	...	1	...	...
builder's	...	...	...	2	...	...
coal yard	...	...	...	1	...	...
copper ore	...	...	...	1	...	1
dock	...	...	...	11	...	3
engineers	...	...	...	1	...	1
flour mills	...	...	...	1	...	1
gas works	...	...	...	1	...	...
general	...	...	...	3	...	2
lairages	...	...	...	1	...	...
platers	...	...	...	1	...	1
railway	...	...	...	2	...	..
ship yard	...	...	...	13	2	4
soap works...	...	...	...	1	...	...
timber yard	...	...	...	2	...	1
Marine store dealer	...	...	...	2	...	1
Machinist...	...	...	...	1	...	1
Motor mechanic	...	...	...	1	...	...
Nurse	...	...	...	1	...	...

Navy	...	...	...	...	1	...	1
Painter	...	...	...	...	2	...	1
Printer	...	...	...	...	1	...	...
Plumber	...	...	...	...	3	...	1
Policeman	...	...	...	...	1	...	1
Postman	...	...	...	...	2	...	1
Rag gatherer	...	...	...	...	1	...	...
Rivetter	...	...	...	...	3	...	2
Salesman	...	...	...	...	1	...	1
Sailor	...	...	...	...	...	1	...
Sawyer	...	...	...	...	1	...	...
School teacher	...	...	...	...	2	...	...
Ship's cook	...	...	...	...	1	...	...
Ship's steward	...	...	...	...	5	...	2
Shipwright	...	...	...	...	1	...	...
Shop assistant	...	...	..	...	1	1	...
Shopkeeper	...	...	...	...	1	...	...
Soap stamper	...	...	...	...	1	...	...
Soap wrapper	...	...	...	...	3	...	...
Store keeper	..	...	...	...	1	..	...
Steel dresser	..	...	...	...	1	...	...
Tailoress	...	...	...	...	1	...	1
Telephone fitter	...	...	...	...	1	..	...
Timekeeper	...	...	...	...	2	...	1
Tinsmith	...	...	...	...	1	...	1
Tabacconist's assistant	...	...	...	...	3	...	...
Traveller	...	...	...	...	2	...	1
Tramcar cleaner	...	...	...	...	1	...	...
Typist	...	...	...	...	1	...	...
Van driver	...	...	...	...	...	1	1
Warehouseman	...	...	...	...	1	...	...
Waggon repairer...	...	..	...	...	1	..	...

Preventive Work

The most important part of the preventive work is the home visitation, whereby the patient and his relatives are instructed in the precautions which should be taken to prevent the spread of the disease, and encouraged to adopt the modes of life best calculated to preserve good health. The Visitors are, on the whole, well received, and the results of their constant supervision over many of the poorer homes have been gratifying.

Number of visits paid by Nurse Gibson	...	2374	
Cases of neglect referred to S.P.C.C.	...	...	3
Sanitary defects notified to the Medical Officer of Health's Department	...	...	28
No. of houses where disinfection was carried out after death or removal	...	...	156

Handkerchiefs and Spitting Flasks.

To encourage patients to take precautions with infectious sputum, spitting flasks are provided free of charge. During the year 146 flasks were given. Arrangements were made for supplying patients with Japanese paper handkerchiefs at a charge of sevenpence per hundred, the cost price; the object of this is to encourage the patients to use the handkerchiefs in the manner explained to them at the Dispensary. Many patients availed themselves of the arrangements.

Educational Work.

The personal instructions of the health visitor regarding the prevention of the spread of Consumption are supplemented by the distribution of pamphlets and pictures. During the year the Dispensary published a simple pamphlet compiled by the Tuberculosis Officer, entitled "Advice to Consumptives and Others," and this is distributed widely among the patients.

Other Dispensary Work.

Examination of "Contacts,"

In view of the fact that Tuberculosis can only be cured when discovered in a moderately early stage of its progress, efforts are made to detect early cases of Tuberculosis occurring in those who have lived in close contact with notified cases of Consumption, and who have thus run the risk of infection. During the year 158 such persons, suffering from suspicious ill-health were medically examined either at the Dispensary or in their own homes, and among them 7 cases of Tuberculosis were found (Pulmonary 3, Non-Pulmonary 4). Incidentally it may be mentioned that in the course of these investigations other unsuspected illnesses and defects were found, and the patients were referred to the appropriate places for treatment.

Co-operation with Medical Practitioners.

The Dispensary co-operates with the Practitioners of the Borough concerning diagnosis (including routine observations of doubtful cases as regards weight and temperature variations); also in securing continuity of treatment by acting as intermediary between the various Sanatoria and the practitioners.

Total number of consultations between Tuberculosis Officer and Practitioners for various purposes during 1915, 206.

Laboratory Work.

The Dispensary undertakes free of charge the microscopic examination of sputum and fluids suspected to contain Tubercle Bacilli, in order to assist Medical Practitioners in diagnosis. During the year 378 specimens have been examined, of which 153 were from patients attending the Dispensary, and 225 were sent by Medical Practitioners.

Treatment

General Treatment is not undertaken, the Dispensary treatment being limited to the application of special methods (*e.g.* Tuberculin) carried on by the Tuberculosis Officer in co-operation with the medical practitioner providing the general treatment of the case. During the year, 25 patients received injections of Tuberculin. Tuberculin is proving a useful aid in the treatment of Tuberculosis, and good results have been obtained in a considerable number of the cases where patients have attended regularly and constantly.

Total Number of Visits to Dispensary.

During the year 571 patients paid 2352 visits to the Dispensary. Of these patients, 410 had not been to the Dispensary before; the remaining 161 had attended during the previous year.

Provision of Garden Shelters

The open-air treatment of Consumption can be carried on at home where there is sufficient garden or back-yard to allow of the erection of a simple open-air sleeping shelter. Unfortunately in large towns very few of the houses afford convenience for this. The Corporation has arranged to supply such shelters to suitable patients, at a small rent, and at the end of 1915 one shelter had been provided and was in constant use.

The Corkhill Fund.

Under the will of the late Mr. John Lloyd Corkhill, of Oxtou, a sum of money was provided for the assistance of persons suffering from Consumption. An arrangement has been made by which the Trustees, while retaining in every respect their position as a private body, make use of the facilities provided by the Dispensary for carrying on work among tuberculous patients. Persons applying for help from the Corkhill Charity are passed through the Dispensary for classification, and the Trustees are largely guided by the Tuberculosis Officer's recommendations. This charity is doing a very excellent work in the Borough. Applications for assistance may be made to Mr. J. Carlisle, c/o Mr. Edgar Hosking, 34 Castle Street, Liverpool.

LEASOWE SANATORIUM FOR SURGICAL TUBERCULOSIS IN CHILDREN.

Many of the bodily deformities which lessen the earning power of men and women, and consequently produce poverty, result from neglected illness in childhood. One of the greatest factors in the production of deformed cripples is the so-called "surgical tuberculosis" of childhood, that is to say, tuberculosis, not of the lungs, but of the bones and joints. Tuberculosis of glands, too, may become a serious menace to life unless the child receives adequate attention.

Just as in Tuberculosis of the lungs, so also in these other forms of Tuberculosis open-air treatment affords the best chance of cure. In a large number of cases of Tuberculosis of bones and joints it is necessary to confine the little patient to bed for many months at a time, with the affected part rigidly fixed by means of carefully applied apparatus. The general hospitals cannot always give up their beds to patients requiring such long periods of treatment, when more acute and urgent cases are asking for admission. Home treatment is rarely successful since constant supervision throughout the day by skilled persons is necessary.

For these and other potent reasons it has become apparent to those who have closely studied the question that special open-air hospitals are needed, built and equipped for the one purpose, and staffed by doctors and nurses of specialised training. The Leasowe Sanatorium, founded by the Liverpool Invalid Children's Association with the approval of the Local Government Board and the Board of Education, is an example of the type of hospital required.

Early in 1914 the Birkenhead Corporation decided to arrange for Birkenhead children to be admitted to the Leasowe Sanatorium, and subsequently the Birkenhead Insurance Committee offered to co-operate in the matter. As a result, 12 beds have been available since August 31st, 1914, and the cases admitted are classified below. Since "Surgical Tuberculosis" is

so amenable to cure, under proper conditions, it is believed that the arrangements made will have a far-reaching effect in decreasing the number of deaths or deformities from this cause.

The following table gives the localisation of the disease in the cases treated :—

Tuberculosis of Spine ..	...	...	...	...	4
„ „ Hip ...	...	...	...	...	3
„ „ Knee ...	...	...	...	...	4
„ „ Elbow ...	...	...	...	...	2
„ „ Metatarsal ...	...	...	...	...	1
„ „ Tibia ...	...	...	...	...	1
„ „ Femur...	...	...	...	...	1
„ „ Malar ...	...	...	..	...	1
„ „ Glands ..	...	...	...	...	1
„ „ Ankle ...	...	...	...	...	1
<hr/>					
Total ...	...	...	...	...	19
Discharged ...	...	...	...	...	7
<hr/>					

December 31st, 1915, the number remaining in 12

The seven cases discharged were as follows :—one case of Metatarsal, cured ; one case of Tibia, cured ; one case of Spine, cured ; one case of Knee, died ; one case of Glands, cured ; one case of Malar, cured ; one case of Ankle, cured.

National Health Insurance.

The Tuberculosis Officer is the Medical Adviser to the Birkenhead Health Insurance Committee, and Sanatorium Benefit is administered through the Dispensary.

Notifications and National Health Insurance.

The 450 notified cases (all forms of Tuberculosis) are classified as regards National Health Insurance as follows :—

	Pulmonary	Non-Pulmonary	Total.
Insured men	124	12	136
Insured women	23	6	29
Dependents	93	101	194
Non-insured class	49	8	57
No particulars obtainable ...	21	13	34
Total	310	140	450

Insured Persons and the Dispensary.

Statistics were kept throughout the year of the position as regards National Health Insurance of all patients attending the Dispensary for all purposes. The 410 persons who paid their first visits to the Dispensary during the year were classified as follows :—

Insured persons	134
Dependents	252
Non-insured class	24

Total	410
--------------	-----

Treatment provided by the Insurance Committee.

The following statistics refer to the work of the Birkenhead Insurance Committee which was transacted through the Dispensary, and refer to the period January 1st to December 31st, 1915, inclusive,

APPLICANTS FOR SANATORIUM BENEFIT.

	Number of Applicants	Rejected on other grounds than health	Examined	Recommended for treatment	Received treatment	
					Pulmonary	Non-Pulmonary
Men ...	70	1	68	69	68	1
Women	12	1	12	11	11	...
Total ...	82	2	80	80	79	1

* Out of 70 male applicants, 68 were examined and 2 were military cases sent direct to Sanatorium from military hospitals.

TREATMENT GIVEN.

	Men	Women	Total
Sanatorium	29	10	39
Hospital ..	1	...	1
Dispensary	7	6	13
Domiciliary	137	35	172

N.B.—This table refers to cases remaining under treatment on December 31st, 1914, as well as those whose first application were received during 1915. Many of the cases received more than one kind of treatment, and appear under different headings in the Table. Refer also to the section on the work of the Dispensary, under the heading of "Treatment," Domiciliary treatment was supplemented by the provision of extra nourishment in necessitous cases,

Results of Treatment.

The following figures must be construed with great care and hasty conclusions avoided. It must be distinctly borne in mind that they cannot be used to compare the value of one kind of treatment with another, because they refer to entirely different classes of cases, and different degrees of disease.

	Sanatorium		Hospital		Dispensary	
	Men	Women	Men	Women	Men	Women
Discharged (including those transferred from one form of treatment to another :—						
(a) fit for work	18	3	..	..	1	3
(b) improved	2	3	..	..	..	..
(c) without improvement	4	..	1	..	1	2
(d) worse ... ..	..	1	..	..	..	..
Discontinued for other than medical reasons ... ..	..	..	..	..	1	..
Died ... ..	..	..	..	..	3	..
Total cases in which treatment concluded	24	7	1	..	6	5
Still under treatment	5	3	..	..	1	1
TOTAL TREATED	29	10	1	..	7	6

DOMICILIARY TREATMENT.

	Men	Women
Completed Domiciliary Treatment : —		
(a) Fit for work	24	8
(b) Recommended for other forms of treatment	4	3
Discontinued for other than medical reasons	16	2
Died	28	6
Total treatment concluded	72	19
Still under treatment	65	16
	137	35

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of notifications during the period from 3rd January, 1915, to the end of the week ending 1st January, 1916.

[illegible]

Inquests.—The number of inquests held during 1915 was 174, thus 7·9 per cent. of the sum of the deaths in the Borough formed the subject of official enquiries. There was one death due to overlaying during the year.

Deaths not Certified.—Not all the death causes which are classified represent diseases or symptoms observed and certified by medical men in attendance during the last illness, or verdicts following official investigation. A significant proportion of the death causes are entered in the register on the doubtful testimony of deceased persons' relatives or friends, or fellow lodgers. The registrars have, therefore, been required to mark in the returns furnished, every death not certified by a registered practitioner, or made the subject of a coroner's inquest. In 1915, out of the 2,193 deaths registered, 3 were marked "not certified," that is 0·13 per cent. The causes of the 3 deaths were entered in accordance with the statements of persons giving information to the registrars as follows:—

Cerebo-Spinal Meningitis ...	...	...	...	...	1
Heart Disease ...	...	...	...	...	1
Epilepsy ...	...	...	...	...	1

though how such conclusions were arrived at does not appear. In my opinion such deaths ought not to be registered without a Coroner's certificate.

The proportion of uncertified deaths to the sum of the deaths was as already stated, 0·13 per cent. as compared with 0·27 per cent. in 1914.

Illegitimacy.—Statistics relating to illegitimacy are important, not merely on account of the bearing which such a subject has upon the social life of the community, but also with a view ultimately of showing to some extent the influence which illegitimacy exerts upon the "chances of life" of infants, as it is well known that the death-rate of illegitimate children is considerably greater than that of those born in wedlock. I have

thought it desirable, therefore, to continue these statistics in this report, as the subject is one of some interest.

The following table gives the total number of legitimate and illegitimate births, with the rates per 1000 of births and per 1000 living, and statistics relative to the deaths of such children under one year of age.

Illegitimate Births and Deaths, 1915.

Registrar's Sub-District	Estimated Population 1915.	BIRTHS		ILLEGITIMATE BIRTHS		Total deaths of children under one year of age	Deaths of illegitimate children under one year of age	Percentage of deaths of illegimates to total deaths under one year of age
		Legitimate	Illegitimate	to 1000 living	to 1000 births			
Birkenhead ..	69820	2205	85	1·2	38·5	322	15	4·6
Tranmere, Oxtou, Cloughton, and Bebington and Workhouse ..	70471	1533	48	0·6	31·3	147	14	9·5
Total ..	140291	*3738	133	0·9	35·5	469	29	6·1

*27 births have since been transferred to other places. Hence the difference in total as given on unrevised number.

HOUSING OF THE WORKING CLASSES ACTS 1890 to 1909.

During the twelve months ending 31st December, 1915, a large amount of work was carried out by the Department under the provisions of the Housing of the Working Classes Acts, 1890 to 1909, and the Regulations made by the Local Government Board dated 2nd September, 1910, the particulars of which are as follows, viz. :—

The number of dwelling houses inspected for the purposes of Section 17 of the Act of 1909, and the Regulations made by the Local Government Board during 1915 1903

The number of dwelling-houses, which on inspection,
were considered to be in a state so dangerous or
injurious to health as to be unfit for human
habitation —

During the year no representations were actually made
to the Committee, but several reports upon certain
blocks of property were in course of preparation for
its consideration, but were held over on account of
the outbreak of war

The number of dwelling-houses dealt with and made fit
for human habitation under Sections 14 and 15 of
the Act of 1909 60

The number of dwelling-houses inspected under Section
17 of the Act of 1909, and the Housing Regulations
1910, and the defects found therein remedied under
the provisions of the Public Health Act, 1875, and
the houses put into a proper and satisfactory
condition 682

The number of closing orders made —

This number of dwelling-houses, the defects of which
were remedied without the making of closing orders 13

In connection with this work it may be explained that there
are a number of houses, the subject of representations, now
in course of being altered and made fit for habitation, under
arrangement with the Health Committee, and in which the work
was not completed at the end of the year.

The number of dwelling houses which, after the making of closing orders, were put into a fit state for human habitation	...	...	...	...	...	6
The number of demolition orders made	...	...	...	...	...	—
The number of dwelling houses demolished	...	...	...	...	...	23
26 "Back to Back" houses were converted into 13 single "through" houses	...	..	...	...	...

The general character of the defects found to exist were back to back or solid backed houses, no through ventilation, crowded and confined conditions, the want of, or insufficient yard space, water supply and sanitary conveniences, and general repairs.

I think the year's record must be considered a satisfactory one, under present circumstances.

I am, Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
TOWN HALL, BIRKENHEAD.

10th April, 1916.



M. K. ROBINSON, M D.,
FIRST MEDICAL OFFICER OF HEALTH FOR BIRKENHEAD.

Obituary Notice.

MAJOR KIRKBY ROBINSON, M.D., M.R.C.S., L.S.A.,

First Medical Officer of Health for Birkenhead.

M. K. ROBINSON was born at Acomb, Yorkshire, on the 21st May, 1832, his father being a gentleman of private means. He was educated at St. Peter's School, York, and took his medical training in London, becoming M.R.C.S. and L.S.A. in 1855, and ten years later he graduated M.D. at the University of Erlangen. He was appointed Medical Officer of Health for Birkenhead in 1863, being one of the first persons to be appointed to such an office in the United Kingdom. Here he remained until 1866, when he was appointed Medical Officer of Health to the Borough of Leeds, and subsequently in 1872 went as Medical Officer of Health to the East Kent combined District (which includes the Borough of Dover), and here he remained until within a week of his death, which took place on March 31st, 1916.

He was not a voluminous writer, and beyond his annual reports he only contributed one paper to the Medical Journals—this was on "Epidemic Sore Throat, etc.," published in the "Practitioner," in 1884—and a few short notes to "The Medical Officer." But having been closely connected with the Public Health Service from its earliest days he was keenly interested in

everything affecting its welfare, and his wide experience made his opinions most valuable and much sought after by his fellow medical officers.

His salary at East Kent was worth £1070 per annum, and with other emoluments in connection with Fever Hospitals, and his appointment as School Medical Officer for the District, he was reputed to be one of the most highly paid Medical Officers in the Service.

He was a man of charming manners, and it was always a great pleasure to meet him at the Health Congresses and elsewhere.

He was a brother of the late Canon Robinson, the distinguished Master of St. Catherine's College, Cambridge, and of the Rev. Basil Robinson.

He left issue a son, Captain Grant Robinson, of Dover, and his grandson is Mr. Nelson Robinson.

THE INFECTIOUS DISEASES HOSPITAL,
TOLLEMACHE ROAD.

Report for the Year 1915.

HOSPITAL VISITING SUB-COMMITTEE.

MR. ALDERMAN E. G. MASON, J.P., Chairman.

MR. ALDERMAN THOMAS SHAW.

MR. ALDERMAN MICHAEL BYRNE.

MR. COUNCILLOR ROBERT FRAME.

MR. COUNCILLOR W. W. KELLY.

MR. COUNCILLOR D. R. ROWLANDS.

MEDICAL OFFICER.

DR. R. SYDNEY MARSDEN.

EXTRA SURGEON.

DR. H. H. ROBINSON,

MATRON.

MISS EMILY YEOMANS.

There has been no addition to the number of beds in the hospital during the year. The full Staff consists of the Matron, 17 nurses, 19 female servants, an engineer, 2 porters and 2 gardeners

The total number of patients treated in the hospital during the year (January 1st to December 31st) was 327; of these 307 were admitted during the year, and 20 remained in hospital from 1914. Out of those admitted 14 died, giving a death-rate of 4.56 per cent., a low percentage.

The following table gives a summary of the cases treated in the hospital during the year 1915, along with the results obtained.

DISEASES	M.	F.	Re-covered		Died	
			M.	F.	M.	F.
Scarlet Fever—remaining ..	7	10	7	10	..	..
admitted ..	109	125	108	122	1	3
Typhoid—admitted ..	7	5	7	5	..	..
remaining ..	1	..	1	..	..	..
Diphtheria—remaining ..	..	2	..	2	..	..
admitted ..	27	16	22	12	5	4
Chicken Pox—admitted ..	1	..	1	..	..	..
Phthisis ..	1	..	1	..	..	..
Measles ..	1	..	1	..	..	..
No visible sign of disease ..	..	1	..	1	..	..
Quinsey —admitted ..	1	..	1	..	..	..
Follicular Sore Throat ..	2	3	2	3	..	..
Pneumonia ..	1	..	1	..	..	..
Rheumatism ..	1	..	1	..	..	..
Cerebro-Spinal Meningitis,,	1	1	1	..	..	1
Gastric Catarrh ..	3	..	3	..	..	..
Cold and Diarrhoea ..	..	1	..	1	..	..

The case of Measles was sent as Scarlatina, the case of Quinsey and the five cases of Follicular Sore Throat as Diphtheria. The Pneumonia as Typhoid, and also the case of Rheumatism. Two cases of Gastric Catarrh were sent as measles, and one case sent as Enteric Fever. The case of Cold and Diarrhoea was sent as Typhoid,

The new smallpox hospital, which is in course of erection at Thingwall, was expected to be ready by the end of 1915, but owing to the outbreak of the war the work is not being proceeded with at present.

By special agreement with the Corporation of Wallasey, small-pox cases from this Borough are now sent to the Wallasey Small-pox Hospital.

I will repeat again what I said last year, viz : that a change has taken place at the Hospital in regard to the length of time for the detention of Scarlatina cases. Acting on the modern views held in regard to such cases, we have now for a very long time discharged all uncomplicated cases of Scarlatina at the end of the fourth week, whether they are peeling or not, and with marked advantage, as the number of return cases has been greatly reduced, whilst the capacity of the Hospital for Scarlatina cases has been increased by one-third. It was formerly the custom to isolate for a minimum of six weeks, or until such a time as peeling was completed. We now disregard peeling after the middle of the fourth week, so that we save two weeks' expenses on each case. This accounts for the greatly reduced cost of the Hospital, whilst a third more Scarlatinal patients can be treated with the same number of beds, a very important matter when the disease is epidemic.

THE E. P. SMITH MEMORIAL CONVALESCENT FUND.

FOR PATIENTS WHO HAVE BEEN TREATED IN THE FEVER
HOSPITAL.

Particulars relating to this fund were given in my Report for 1903.

There were three suitable cases to receive benefit by the fund during the year 1915, but only one case would avail himself of the benefit, viz :

T. C. in June.

APPENDIX.

1—Vital Statistics of Whole District during 1915 and previous years.

2—Causes of and Ages at Death during 1915.

3—Cases of Infectious Diseases notified during 1915.

4—Infantile Mortality during the year 1915.

TABLE I.—Deaths Registered in the County Borough of Birkenhead during the year ending December 31st, 1915, classified according to age.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the year ending December 31st, 1915.

TABLE III.—Weekly Condensed Register of Deaths for 1915.

TABLE IV.—Weekly Condensed Register of Meteorological Results for 1915.

Return of Military and Naval Cases—1915.

Vital Statistics of Whole District during 1915 and previous Years.

Year	Population estimated to Middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT				
		Un-corrected Number.	Nett.		Number	Rate	of Non-residents registered in the District	of Resi-dents not registered in the District	Under 1 year of age		At all ages	
			Number	Rate					Number	Rate per 1,000 Nett Births	Number	Rate
1910	129227	3730		28·8	1930	15·3	17	30	507	135	1993	15·4
1911	131377	3748	3732	28·4	2054	15·6	29	82	509	136	2107	16·0
1912	133521	3793	3774	28·2	1920	14·3	36	80	371	98	1964	14·7
1913	135740	3931	3907	28·7	1972	14·5	46	106	458	117	2032	14·9
1914	137996	3790	3772	27·3	2112	15·3	85	126	462	122	2153	15·6
1915	140251	3864	3844	27·4	2227	15·8	138	104	469	122	2193	15·6

Total Population at all ages - 130,794

Number of inhabited houses - 24,343

Average number of persons per house 5·3

Area of District in acres (exclusive of area covered by water) } 3,850

Total families or separate occupiers 26,887

At Census, 1911.

Causes of, and Ages at Death during year 1915.

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES OF RESIDENTS, WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										DEATHS IN OR BELONGING TO LOCALITIES AT ALL AGES.						TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT
		All ages	Under 1 year	1 and 2	2 and 5	5 and 15	15 and 25	25 and 45	45 and 65	65 and up	Whole Borough	Bir- ken- head	Tran- mere	Clan- gton	Oxt- on	Reb- bing- ton.	Work house	
All causes	Certified	2190	469	143	95	86	83	297	490	527	2190	1064	587	71	34	36	398	259
	Uncertified	3	1	...	...	1	...	...	...	2	3	...	1	...	1	1	...	...
Chicken-pox	...	1	1	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Enteric Fever	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	7	2	4	1	...	...	...	...	...	7	3	4	...	...	...	...	4
Scarlet fever	...	4	...	...	...	...	...	...	...	...	4	3	1	...	...	...	...	...
Whooping-cough	...	42	21	15	6	...	...	...	...	...	42	28	14	...	...	...	...	11
Diphtheria and Membranous Croup	...	19	2	1	11	5	1	2	3	6	15	8	4	...	1	2	...	...
Influenza	...	15	1	...	...	...	...	...	...	...	19	8	4	...	...	...	...	...
Erysipelas	...	7	...	...	...	...	...	1	4	2	7	1	1	...	...	...	6	...
Cerebro-Spinal Fever	...	4	...	...	...	2	2	...	...	...	4	...	2	1	1	...	...	1
Other Zymotic Diseases	...	11	2	1	2	...	...	3	3	...	11	2	3	...	...	...	5	1
Phthisis (Pulmonary Tuberculosis)	...	173	...	...	3	11	23	76	50	10	173	66	40	4	2	1	60	13
Tuberculous Meningitis	...	25	3	10	8	2	...	...	...	...	25	16	8	...	...	...	1	4
Other tuberculous diseases	...	42	5	6	10	9	3	7	2	...	42	16	11	2	1	...	12	9
Rheumatic Fever, Rheumatism	...	11	1	...	1	...	...	1	5	1	11	7	2	...	...	...	2	1
Cancer, malignant disease	...	121	...	...	...	...	...	10	70	41	121	43	38	2	7	3	28	10
Bronchitis	...	179	27	8	2	1	...	7	50	84	179	89	50	6	1	5	28	9
Broncho-Pneumonia	...	120	37	34	12	4	3	4	9	17	120	68	35	...	...	...	16	16
Pneumonia (all other forms)	...	133	12	9	4	3	12	42	32	19	133	62	27	4	4	4	32	13
Other diseases of Respiratory organs	...	37	1	4	1	3	1	4	12	11	37	22	11	1	1	1	1	4
Diarrhoea and Enteritis	...	176	124	36	6	1	1	4	2	2	176	133	32	4	...	2	5	10
Appendicitis and Typhlitis	...	7	...	...	1	3	2	1	...	...	7	5	2	...	...	...	...	6
Alcoholism	...	3	...	...	...	...	...	2	1	...	3	1	1	...	...	...	1	...
Cirrhosis of Liver	...	18	...	...	...	...	...	5	8	5	18	8	5	...	1	1	3	...
Nephritis and Bright's Disease	...	48	...	1	2	2	...	12	21	10	48	23	14	2	2	1	6	9
Puerperal Fever	...	8	...	...	...	...	1	6	1	...	8	1	1	...	...	...	6	...
Other accidents and diseases of Preg- nancy and Parturition	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Debility & Malformation, including Premature Birth	...	14	...	...	...	...	1	13	...	...	14	5	5	2	...	...	2	5
Violent Deaths, excluding Suicide	...	182	179	2	...	1	...	...	...	...	182	123	42	6	...	1	10	9
Suicides	...	91	8	3	7	16	10	18	20	12	94	50	26	6	1	6	5	45
Brain Disease	...	6	...	...	...	...	...	2	...	...	6	3	1	1	1	...	...	1
Heart Disease	...	107	2	2	8	3	3	10	42	37	107	37	40	7	4	3	16	10
Other Diseases	...	184	...	...	...	6	9	24	74	71	184	72	51	5	3	1	52	14
		394	41	6	9	11	10	39	78	200	394	162	104	17	5	5	101	54
		2193	469	143	95	87	83	297	490	529	2193	1064	588	71	35	37	398	259

Cases of Infectious Disease notified during the year 1915.

Notifiable Disease.	Number of Cases notified.								Total Cases notified in each Locality (e.g. Parish or Ward) of the District.								Total Cases removed to Hospital			
	At all Ages.	Under 1 year	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 45 years.	45 to 65 years.	65 and upwards.	Argyle	Cleveland	Oxton	Claughton	Clifton	Egerton	Mersey	Bebington		Workhouse		
																		In-patients and out-patients	Cases from outside Borough	
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Group)	80	2	29	39	5	4	1	...	4	12	15	7	13	11	11	5	...	...	43
Erysipelas	105	1	1	1	12	32	43	13	9	15	14	1	20	7	6	3	...	...	234
Scarlet Fever	299	2	71	178	30	15	1	...	29	61	32	11	95	43	12	7	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	20	...	1	5	4	10	...	...	4	...	5	2	4	3	...	...	...	...	12
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	12	...	...	...	2	9	1	...	...	1	...	...	2	1	1	...	7	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever	4	...	...	2	2	...	...	...	...	...	1	1	1	1	1	...	...	...	2
Acute Poliomyelitis	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis	280	1	10	37	48	121	54	9	48	79	56	3	3	48	18	15	2	5	3	
Other forms of Tuberculosis	133	14	44	51	6	14	3	1	25	35	27	5	19	13	7	1	...	...	...
Ophthalmia Neonatorum	91	91	...	...	...	...	...	...	15	24	19	...	18	5	9	...	...	1	...
Totals...	1025	4	111	313	109	205	103	23	134	227	168	16	30	220	102	62	18	44	4	291

Infantile Mortality during the year 1915.

CAUSE OF DEATH.		Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 1 month	1-3 mos.	3-6 mos.	6-9 mos.	9-12 mos.	Total Deaths under 1-yr
All Causes:—		77	22	20	23	142	90	104	83	50	469
Certified		..	..	..	..	..	..	..	..	..	..
Uncertified		..	..	..	..	..	..	..	..	..	..
Smallpox		..	..	..	..	..	..	..	..	..	..
Chickenpox		..	..	..	..	..	..	..	..	..	..
Measles		..	..	..	..	..	..	..	..	..	..
Scarlet Fever		..	..	..	..	..	..	..	..	..	..
Whooping Cough		..	..	..	..	..	..	..	..	..	..
Diphtheria and membranous croup		..	..	..	..	..	..	..	..	..	..
Erysipelas		..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis		..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis		..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases		..	..	..	..	..	..	..	..	..	..
Meningitis (not tuberculous)		..	..	..	..	..	..	..	..	..	..
Convulsions		4	1	..	..	5	..	2	2	2	11
Laryngitis and Croup		..	3	..	..	4	9	6	5	3	27
Bronchitis		..	..	1	..	..	9	11	15	14	49
Pneumonia (all forms)		..	..	..	..	..	9	26	20	11	65
Diarrhoea		..	3	1	2	6	12	19	11	8	65
Enteritis		..	..	..	..	1	1	4	2	..	8
Gastritis		1	1	..	..	1	..	..	..	1	2
Syphilis		..	..	..	..	..	..	..	..	..	..
Rickets		..	..	..	..	..	..	..	..	..	..
Suffocation, overlying		2	..	1	..	3	3	1	1	..	8
Injury at Birth		..	..	..	..	..	..	..	..	..	..
Atelectasis		2	..	1	..	3	..	..	..	..	3
Congenital Malformations		12	2	2	2	18	3	1	1	..	23
Premature Birth		40	6	5	5	56	8	..	..	..	64
Atrophy, Debility, Marasmus		12	5	5	10	32	27	22	6	5	92
Other Causes		4	1	3	3	11	3	4	3	1	22
		77	22	20	23	142	90	104	83	50	469

Net Births in the year { legitimate 3722
 illegitimate 122

Net Deaths in the year of { legitimate infants 440
 illegitimate infants 29



TABLE 1.—Deaths Registered in the Borough of Birkenhead during the Year ending December 31st, 1915.

CLASS.	CAUSES OF DEATH.	CLEVELAND, CLAUGHTON, GRANGE AND ARGYLE WARDS.														OXTON EGBERTON, CLIFTON AND MERSEY WARDS.														BEBINGTON WARD.														UNION HOSPITAL.														SUMMARY.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		AGES AT DEATH.														SEX.		TOTAL.	AGES AT DEATH.														SEX.		TOTAL.	AGES AT DEATH.														SEX.		TOTAL.	SEX.			TOTAL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75		75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40		40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5		5-10	10-15	15-20		20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	M	F	Under 1 Year.	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead.

BIRKENHEAD SUB-REGISTRATION DISTRICT

[illegible]

NOTE.—The weeks end January 7th, 14th, 21st, &c.; the last week in the year includes one day extra.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1915.

TRANSMERE SUB-REGISTRATION DISTRICT

[illegible]

	Males	Females
Mean age at first marriage	20.7	19.6
Mean age at second marriage	28.1	27.1
Mean age at third marriage	34.9	34.0
Mean age at fourth marriage	40.3	39.5
Mean age at fifth marriage	45.3	44.5
Mean age at sixth marriage	49.7	48.9
Mean age at seventh marriage	53.5	52.7
Mean age at eighth marriage	57.0	56.2
Mean age at ninth marriage	60.3	59.5
Mean age at tenth marriage	63.5	62.7
Mean age at eleventh marriage	66.7	65.9
Mean age at twelfth marriage	69.9	69.1
Mean age at thirteenth marriage	73.1	72.3
Mean age at fourteenth marriage	76.3	75.5
Mean age at fifteenth marriage	79.5	78.7
Mean age at sixteenth marriage	82.7	81.9
Mean age at seventeenth marriage	85.9	85.1
Mean age at eighteenth marriage	89.1	88.3
Mean age at nineteenth marriage	92.3	91.5
Mean age at twentieth marriage	95.5	94.7
Mean age at twenty-first marriage	98.7	97.9
Mean age at twenty-second marriage	101.9	101.1
Mean age at twenty-third marriage	105.1	104.3
Mean age at twenty-fourth marriage	108.3	107.5
Mean age at twenty-fifth marriage	111.5	110.7
Mean age at twenty-sixth marriage	114.7	113.9
Mean age at twenty-seventh marriage	117.9	117.1
Mean age at twenty-eighth marriage	121.1	120.3
Mean age at twenty-ninth marriage	124.3	123.5
Mean age at thirtieth marriage	127.5	126.7
Mean age at thirty-first marriage	130.7	129.9
Mean age at thirty-second marriage	133.9	133.1
Mean age at thirty-third marriage	137.1	136.3
Mean age at thirty-fourth marriage	140.3	139.5
Mean age at thirty-fifth marriage	143.5	142.7
Mean age at thirty-sixth marriage	146.7	145.9
Mean age at thirty-seventh marriage	149.9	149.1
Mean age at thirty-eighth marriage	153.1	152.3
Mean age at thirty-ninth marriage	156.3	155.5
Mean age at fortieth marriage	159.5	158.7
Mean age at forty-first marriage	162.7	161.9
Mean age at forty-second marriage	165.9	165.1
Mean age at forty-third marriage	169.1	168.3
Mean age at forty-fourth marriage	172.3	171.5
Mean age at forty-fifth marriage	175.5	174.7
Mean age at forty-sixth marriage	178.7	177.9
Mean age at forty-seventh marriage	181.9	181.1
Mean age at forty-eighth marriage	185.1	184.3
Mean age at forty-ninth marriage	188.3	187.5
Mean age at fiftieth marriage	191.5	190.7
Mean age at fifty-first marriage	194.7	193.9
Mean age at fifty-second marriage	197.9	197.1
Mean age at fifty-third marriage	201.1	200.3
Mean age at fifty-fourth marriage	204.3	203.5
Mean age at fifty-fifth marriage	207.5	206.7
Mean age at fifty-sixth marriage	210.7	209.9
Mean age at fifty-seventh marriage	213.9	213.1
Mean age at fifty-eighth marriage	217.1	216.3
Mean age at fifty-ninth marriage	220.3	219.5
Mean age at sixtieth marriage	223.5	222.7
Mean age at sixty-first marriage	226.7	225.9
Mean age at sixty-second marriage	229.9	229.1
Mean age at sixty-third marriage	233.1	232.3
Mean age at sixty-fourth marriage	236.3	235.5
Mean age at sixty-fifth marriage	239.5	238.7
Mean age at sixty-sixth marriage	242.7	241.9
Mean age at sixty-seventh marriage	245.9	245.1
Mean age at sixty-eighth marriage	249.1	248.3
Mean age at sixty-ninth marriage	252.3	251.5
Mean age at seventieth marriage	255.5	254.7
Mean age at seventy-first marriage	258.7	257.9
Mean age at seventy-second marriage	261.9	261.1
Mean age at seventy-third marriage	265.1	264.3
Mean age at seventy-fourth marriage	268.3	267.5
Mean age at seventy-fifth marriage	271.5	270.7
Mean age at seventy-sixth marriage	274.7	273.9
Mean age at seventy-seventh marriage	277.9	277.1
Mean age at seventy-eighth marriage	281.1	280.3
Mean age at seventy-ninth marriage	284.3	283.5
Mean age at eighty marriage	287.5	286.7
Mean age at eighty-first marriage	290.7	289.9
Mean age at eighty-second marriage	293.9	293.1
Mean age at eighty-third marriage	297.1	296.3
Mean age at eighty-fourth marriage	300.3	299.5
Mean age at eighty-fifth marriage	303.5	302.7
Mean age at eighty-sixth marriage	306.7	305.9
Mean age at eighty-seventh marriage	309.9	309.1
Mean age at eighty-eighth marriage	313.1	312.3
Mean age at eighty-ninth marriage	316.3	315.5
Mean age at ninetieth marriage	319.5	318.7
Mean age at ninety-first marriage	322.7	321.9
Mean age at ninety-second marriage	325.9	325.1
Mean age at ninety-third marriage	329.1	328.3
Mean age at ninety-fourth marriage	332.3	331.5
Mean age at ninety-fifth marriage	335.5	334.7
Mean age at ninety-sixth marriage	338.7	337.9
Mean age at ninety-seventh marriage	341.9	341.1
Mean age at ninety-eighth marriage	345.1	344.3
Mean age at ninety-ninth marriage	348.3	347.5
Mean age at one hundred marriage	351.5	350.7
Mean age at one hundred and first marriage	354.7	353.9
Mean age at one hundred and second marriage	357.9	357.1
Mean age at one hundred and third marriage	361.1	360.3
Mean age at one hundred and fourth marriage	364.3	363.5
Mean age at one hundred and fifth marriage	367.5	366.7
Mean age at one hundred and sixth marriage	370.7	369.9
Mean age at one hundred and seventh marriage	373.9	373.1
Mean age at one hundred and eighth marriage	377.1	376.3
Mean age at one hundred and ninth marriage	380.3	379.5
Mean age		

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Total

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year includes one day extra.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1915.

[illegible]

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year includes one day extra.

TABLE III.—Weekly Condensed Register of Deaths for 1915.

[illegible]

MILITARY AND NAVAL CASES.

The deaths of 10 soldiers and 3 sailors were registered in the Borough during the year 1915, of which 11 occurred in Institutions; the remaining 2 being due to drowning.

The following are the particulars respecting the deaths, viz :—

Age	Cause of Death	Branch of Service
26	Pneumonia ...	Military
37	Meningitis ...	"
29	Pneumonia ...	"
19	Phthisis ...	"
46	Bronchitis ...	"
22	Pneumonia ...	"
23	Drowning ...	"
19	Pneumonia ...	"
22	Cystitis ...	"
19	Diabetes ...	"
17	Fractured Skull ...	Naval
24	Drowning ...	"
17	Pneumonia ..	"

